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SOUTH CAROLINA'S FOREST RESOURCES, 1947

by

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FOREWORD

Through the McSweeney-McNary Act of 1928, Congress authorized the Secretary of Agriculture to conduct a comprehensive survey of the forest resources of the United States. The Forest Survey was organized by the Forest Service to carry out the provisions of the Act through the Regional Forest Experiment Stations. In the Southeastern States the Forest Survey is an activity of the Division of Forest Economics of the Southeastern Forest Experiment Station, Asheville, North Carolina.

The five-fold purpose of the Forest Survey is (1) to make a field inventory of the present supply of standing timber, (2) to ascertain the rate at which this supply is being increased through growth, (3) to determine the rate at which it is being reduced through industrial and domestic uses, fire, and other causes, (4) to determine the present consumption and the probable future trend in requirements for forest products, and (5) to interpret and correlate these finds to aid in the formulation of private and public policies regarding forest land management.

South Carolina was inventoried by the Forest Survey in the period 1934-36 and reports presenting the findings have been published. Since then better forest management, more intensive forest use, changes in land use, and other factors have caused changes in the forest growing stock that can only be measured accurately by on-the-ground surveys. This statistical report presents the results of a resurvey made between November 1946 and March 1947. Later an analytical report will be published which will interpret these statistics in the light of existing and anticipated economic conditions and focus attention upon the principal forest problems and possible solutions.

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Field work on the timber inventory phase was under the supervision of M. B. Bryan and was done by the following men: F. A. Bennett, R. W. Cooper, N. F. Force, J. H. Davidson, D. W. Warner, H. R. Scott, and J. J. Zirkle.

Statistical and machine tabulation procedures for obtaining and summarizing the field inventory data were developed by Arthur S. Todd, Jr. The computations were made under the direction of Miss Agnes Creasman, assisted by Mrs. Christine Paxton and Miss Priscilla Walker.

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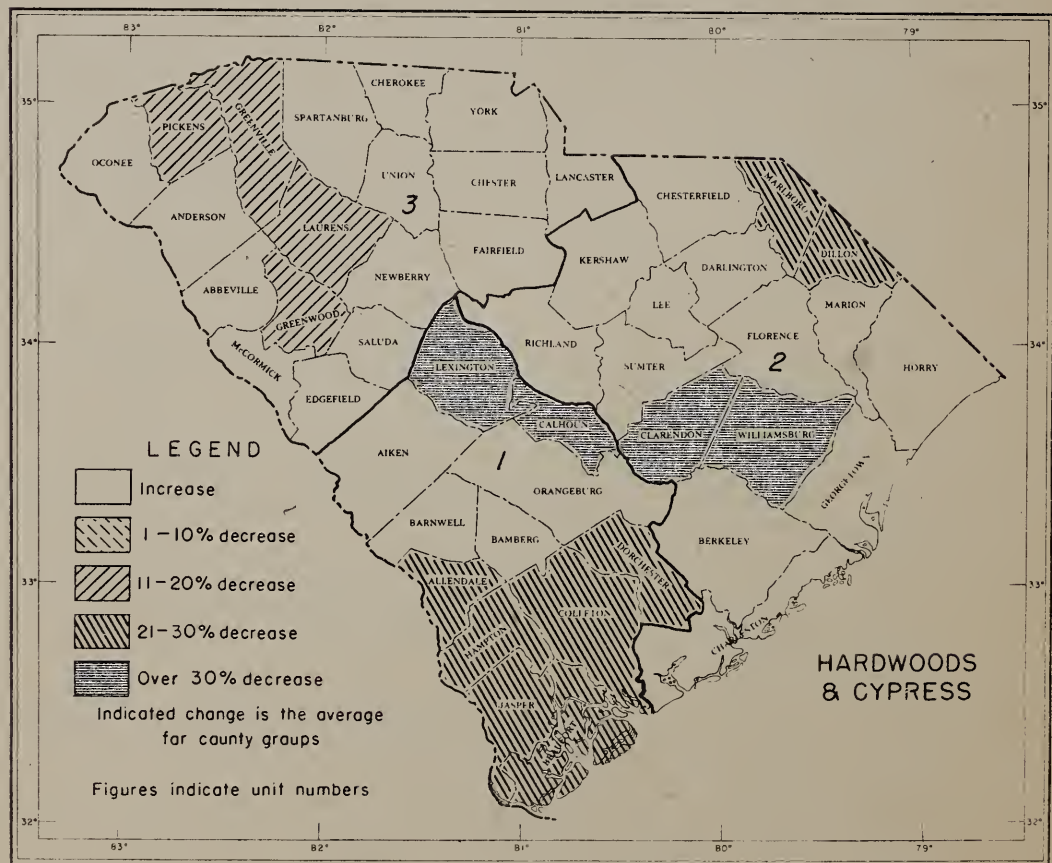
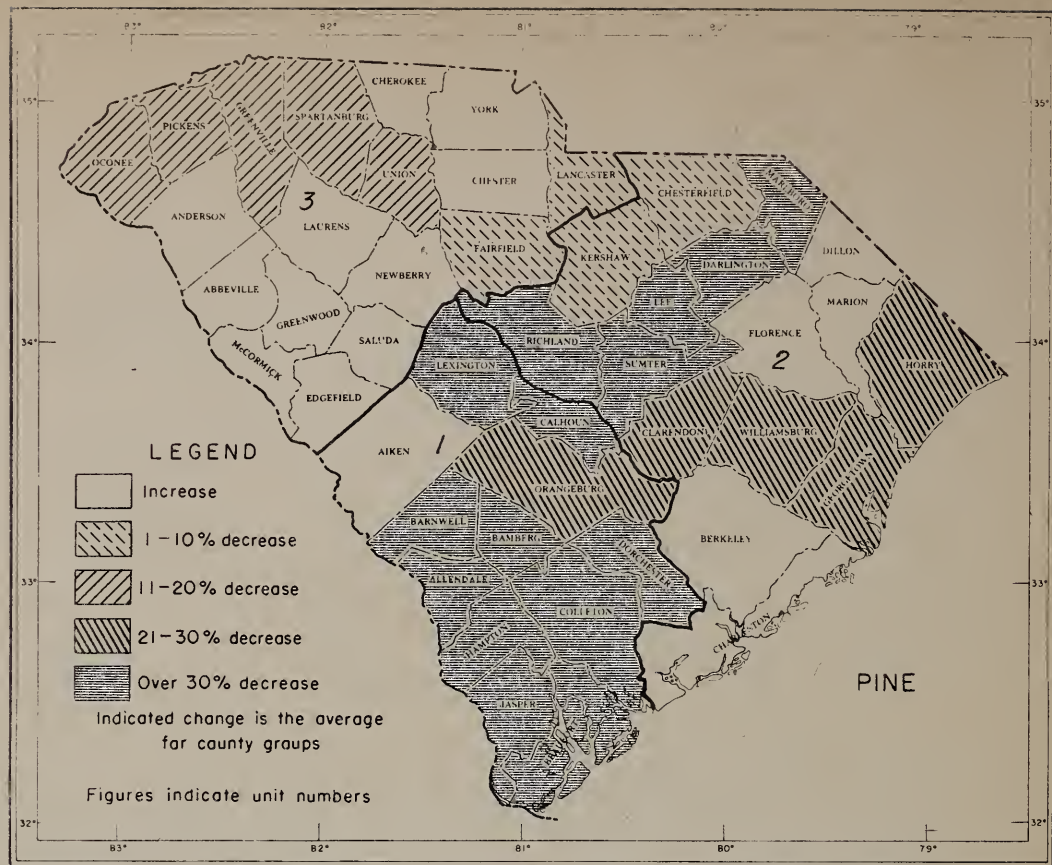


Figure 1. - Change in volume of sound timber 5.0 inches d.b.h. and larger, 1936 to 1947

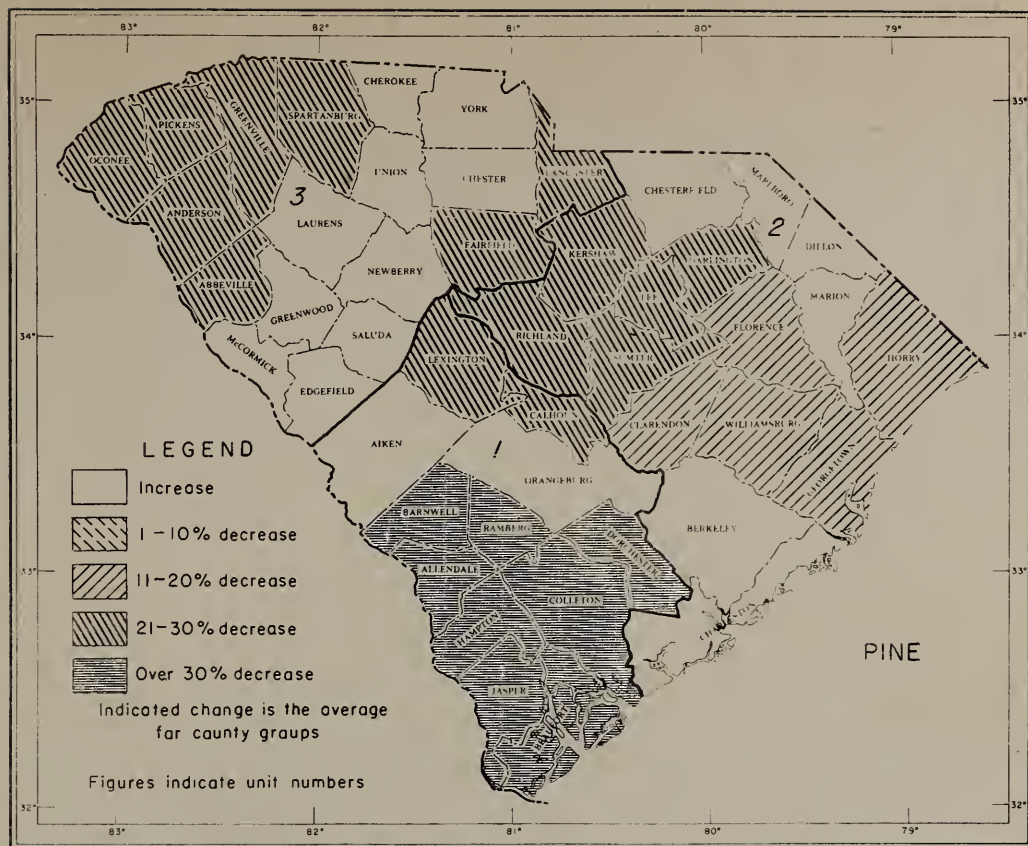


Figure 2. - Change in volume of saw timber, 1936 to 1947

SOUTH CAROLINA'S FOREST RESOURCES, 1947

This report presents the findings of a resurvey of South Carolina's timber resources. This survey, made between November 1946 and March 1948, is the second which has been made of the state by the Forest Survey. It is designed to provide up-to-date facts on forest area, timber volume, growth, and timber drain needed in planning for better development and use of the timber resource. In addition, by comparison with the original inventory, which was completed in 1936, trends in the timber supply can be evaluated.

1947 FACTS AND SIGNIFICANT CHANGES

Forest area increases: In 1947 the area of commercial forest land was 11.9 million acres, a 11.2-percent increase over the 10.7 million acres prevailing in 1936. The greatest increase occurred in the Piedmont where a large amount of agricultural land has reverted to forest.

Table A. - Area of commercial forest land

Survey Unit	1947	1936	Increase since 1936	
	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>	<u>Percent</u>
1. Southern Coastal Plain	3,026,300	2,993,000	33,300	1.1
2. Northern Coastal Plain	4,854,500	4,498,400	356,100	7.9
3. Piedmont	4,018,700	3,187,200	831,500	26.1
Total	11,899,500	10,678,600	1,220,900	11.2

Hardwood type area increases: Hardwood types occupy 39 percent of the forest area in contrast to only 27 percent in 1936. The 1.7 million-acre increase is distributed throughout the state and is due, in part, to conversion of pine-hardwood stands to hardwood by heavy cutting of the pine. Hardwoods have also restocked abandoned fields in many instances. There was no significant change in the total area of the loblolly and shortleaf types, but loblolly now occupies over 40 percent more forest land in the Piedmont than in 1936. Conversion of longleaf stands to scrub oak, chiefly on the Sand Ridge, caused nearly a 40-percent reduction in the longleaf area.

Table B. - Area of forest types

Forest type	1947	1936	Change since 1936	
	<u>Million acres</u>	<u>Million acres</u>	<u>Million acres</u>	<u>Percent</u>
Loblolly pine	4.1	4.0	+ 0.1	+ 2.5
Shortleaf pine	2.1	2.0	+ 0.1	+ 5.0
Longleaf pine	1.1	1.8	- 0.7	- 38.9
Lowland hdwds.	3.2	2.2	+ 1.0	+ 45.4
Upland hdwds.	1.4	0.7	+ 0.7	+100.0

Saw timber on 43 percent of forest land: No direct comparison of forest area by stand class is possible, as different standards were used on the resurvey (see definition of terms, page 116). In 1947 saw-timber stands, containing more than 1,500 board feet per acre, occupied 43 percent of the forest land, 26 percent was stocked with pole-size timber, 24 percent with seedlings and saplings, and 7 percent was stocked very thinly with trees of various sizes. Hardwood stands of pole, seedling, and sapling size occupied 20 percent of the forest land in the state.

Increase in number of hardwood saplings: Since the original survey in 1936, there has been a marked increase in the number of 1.0- to 4.9-inch hardwood trees per average acre, ranging from 7 percent in the Piedmont to 60 percent in the Northern Coastal Plain. In contrast, the number of pines remained practically the same in two survey units and increased less than the hardwoods in the third. As a result, young hardwoods now make up a larger part of the sapling stand in all three survey units.

Table C. - Change in number of saplings per average
acre, 1936 to 1947

Survey Unit	Softwoods	Hardwoods
	<u>Percent</u>	<u>Percent</u>
1. Southern Coastal Plain	0	+ 14
2. Northern Coastal Plain	+ 10	+ 60
3. Piedmont	- 1	+ 7

Greater volume of pole trees: There was an over-all increase of 15 percent in the volume of pole trees. Cypress showed the greatest gain but because of the small volumes involved, the indicated changes may be relatively insignificant. Hardwoods decreased only in the Southern Coastal Plain. Pines were overcut in the Coastal Plain but increased enough in the Piedmont to more than balance the loss.

Table D. - Percent change in volume of pole trees, 1936 to 1947^{1/}

Survey Unit	Pine	Cypress	Hardwoods	All species
1. Southern Coastal Plain	- 27	+ 18	- 10	- 14
2. Northern Coastal Plain	- 5	+ 80	+ 19	+ 14
3. Piedmont	+ 45	-	+ 57	+ 50
State	+ 11	+ 47	+ 17	+ 15

^{1/} Comparison of volumes in pine and cypress trees 5.0 to 8.9 inches d.b.h., hardwoods 5.0 to 12.9 inches.

Saw-timber volume decreases: The total volume of saw timber in 1947 was estimated to be 29.5 billion board feet, including 2.3 billion feet in 12-inch hardwoods, which were not considered saw timber on the first survey. Omitting those hardwoods, the volume was 27.2 billion feet, 10 percent less than in 1936. Most of the hardwood decrease was in sweetgum, but all of the pines, except the pond, spruce, and white pines, decreased by substantial amounts.

Overcutting was particularly severe in the Southern Coastal Plain, where there was an indicated decrease of 24 percent in total board-foot volume. In the Northern Coastal Plain the trend pointed toward a small reduction, while in the Piedmont the change was too small to be particularly significant.

Table E. - Percent change in saw-timber volume, 1936 to 1947

Survey Unit	Pine	Cypress	Hardwoods ^{1/}	All species
1. Southern Coastal Plain	- 29	- 14	- 16	- 24
2. Northern Coastal Plain	- 6	- 3	- 2	- 4
3. Piedmont	- 2	-	- 3	- 2
State	- 12	- 7	- 6	- 10

^{1/} Comparison of volumes in trees 13.0 inches d.b.h. and larger.

Total sound-tree volume decreases: Chiefly because of the general reduction in saw-timber volume, the total volume in all sound trees 5.0 inches d.b.h. and larger was 5 percent less in 1947 than in 1936. There were gains in both pines and hardwoods in the Piedmont, but volume reductions were the rule throughout the Coastal Plain.

Table F. - Percent change in total sound-tree volume, 1936 to 1947

Survey Unit	Pine	Cypress	Hardwoods	All species
1. Southern Coastal Plain	- 31	- 16	- 18	- 24
2. Northern Coastal Plain	- 4	+ 2	negl.	- 2
3. Piedmont	+ 11	-	+ 19	+ 14
State	- 8	- 5	- 2	- 5

More volume in cull trees: The total amount of sound wood in cull trees has increased from 1.2 billion cubic feet to 1.9 billion, an increase of nearly 60 percent. Most of this volume is in the hardwoods. Cull tree volume is now 18 percent of the total volume in the state, compared to only 11 percent in 1936.

Higher proportion of net growth in hardwood: Although there was less saw timber in 1947, the net annual growth in board feet was only three percent less than in 1936. This can be explained by the currently higher growth rates due to (1) a higher proportion of smaller, fast-growing trees, and (2) lower mortality rates. In 1936 total growth in board feet was 1,380 million board feet compared to 1,341 million feet in 1946 (an additional 116 million feet of growth occurred on 12-inch trees called saw timber on the resurvey). The fairly heavy decline in the softwood growing stock has been paralleled by a reduction in net growth, and softwoods now account for only 69 percent of the net board-foot growth compared to 73 percent in 1936.

In 1946 the net growth on all sound trees 5.0 inches d.b.h. and larger was 5.6 million cords, 65 percent softwoods and 35 percent hardwoods. Net growth of pole timber was only 14 percent of the total, as the volume of pole trees recruiting into saw timber greatly exceeded the volume of saplings growing into pole sizes.

Forest drain at high level: From 1936 through 1946 about 16 billion board feet of timber have been cut from South Carolina's forests, an annual average of 1,473 million feet. The 1946 drain was 1,520 million board feet. The drain of all sound trees 5.0 inches d.b.h. and larger has totaled 53 million cords over the period, an annual average of 4.8 million cords. In 1946 the drain was 5.0 million cords. Hardwoods have provided about 26 percent of the board-foot drain and 29 percent of the drain in cords since 1936. Significant features of the drain pattern are as follows: (1) Pulpwood drain has increased from 394,000 cords in 1936 to 980,000 in 1946. (2) In 1936 over 60 percent of the hardwood lumber was cut from sweetgum; in 1946 only 25 percent; production of lumber from oak, yellow-poplar, and the black gums has increased. (3) Much less good-quality pine is cut for fuelwood; greater use is being made of sawmill waste, cull trees, and small, low-quality hardwoods. (4) The 1946 drain on all sound hardwoods 5.0 inches d.b.h. and larger was over five percent of the growing stock in 11 counties; softwood drain was over five percent in 21 counties (fig. 3)..

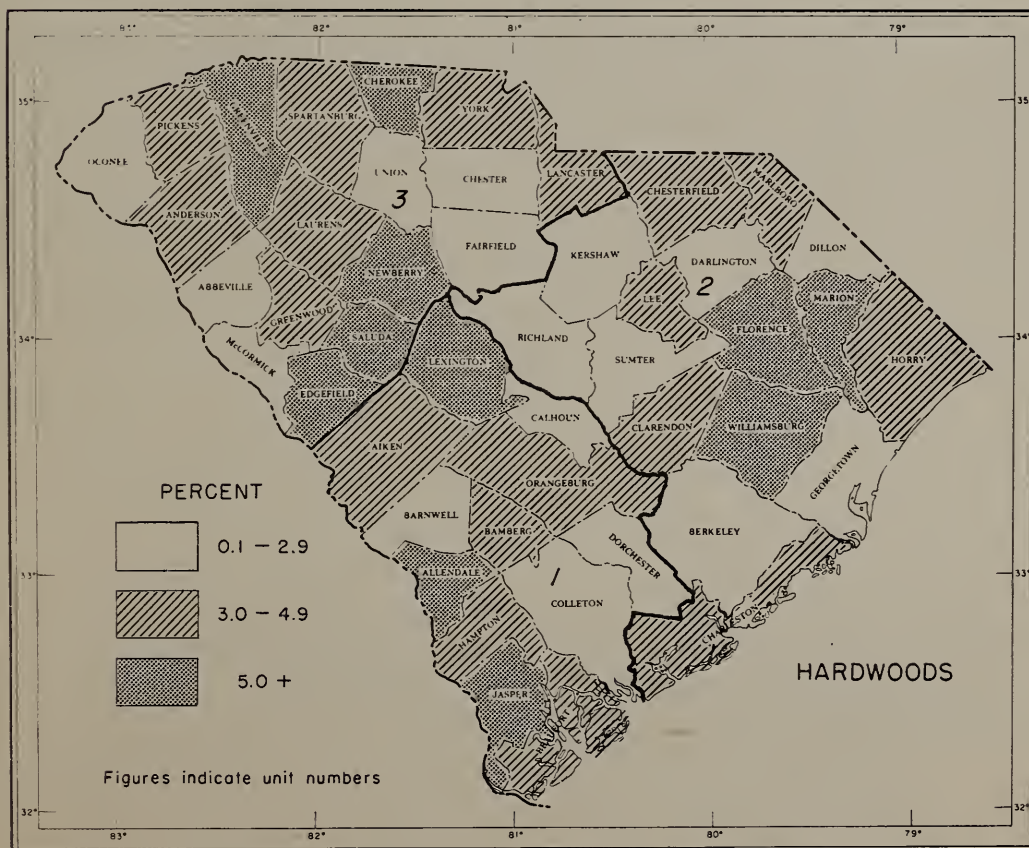
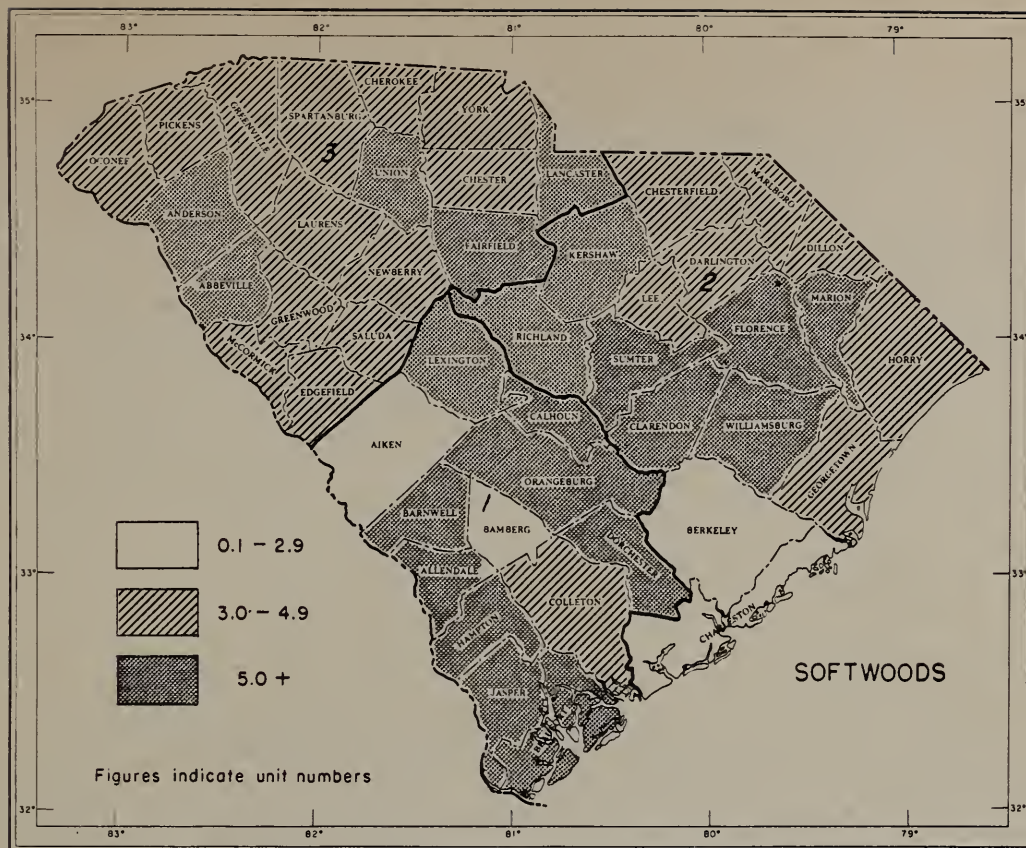


Figure 3. - 1946 commodity drain as a percent of the inventory of sound trees 5.0 inches d.b.h. and larger

Table 1. - Gross area^{1/} of South Carolina by broad use class, 1947

Class of use	Area	
	<u>Acres</u>	<u>Percent</u>
Forest:		
Commercial	11,899,500	59.9
Withdrawn	40,200	0.2
Non-productive	2,900	<u>2/</u>
Total forest	11,942,600	60.1
Non-forest:		
Idle	1,574,700	7.9
Agriculture	4,849,600	24.4
Marsh	466,800	2.4
Dune and beach	28,900	0.1
Urban and other ^{3/}	465,400	2.3
Total non-forest	7,385,400	37.1
Total land	19,328,000	97.2
Total water	547,200	2.8
All classes	19,875,200	100.0

^{1/} From U. S. Bureau of the Census, 1940.

^{2/} Less than 0.05 percent.

^{3/} Includes urban, suburban residential, and rural industrial areas, rights-of-way, cemeteries, schools, etc.

Table 2. - Ownership of land in South Carolina, 1947

Class of ownership	All land		Commercial forest land	
	<u>Acres</u>	<u>Percent</u>	<u>Acres</u>	<u>Percent</u>
Public:				
National forest	581,700	3.0	516,000	4.3
Indian	4,300	<u>1/</u>	2,600	<u>1/</u>
Other federal	265,200	1.4	141,000	1.2
Total federal	851,200	4.4	659,600	5.5
State	429,900 ^{2/}	2.2	172,300 ^{3/}	1.5
County and municipal	53,900	0.3	21,500	0.2
Total public	1,335,000	6.9	853,400	7.2
Private	17,993,000	93.1	11,046,100	92.8
All classes	19,328,000	100.0	11,899,500	100.0

1/ Less than 0.05 percent.

2/ Includes 148,100 acres under long-term lease from the Federal Government.

3/ Includes 122,800 acres under long-term lease from the Federal Government.

Table 3. - Ownership of all private properties of 1,000 acres or more in South Carolina, 1946^{1/}

Class of ownership	Distribution of all land ^{2/}	
	<u>Acres</u>	<u>Percent</u>
Corporate:		
Pulp company	642,900	15.5
Lumber company	688,700	16.6
Other forest industry	91,500	2.2
Bank, loan, and insurance	44,600	1.1
Railroad	17,600	0.4
Other	372,300	9.0
Total corporate	1,857,600	44.8
Individual:		
Estate, club, preserve	385,700	9.3
Farmer	1,035,600	24.9
Lumberman	338,100	8.1
Other forest industry	11,400	0.3
Other individual	501,300	12.1
Total individual	2,272,100	54.7
Unknown	20,900	0.5
All classes	4,150,600	100.0

^{1/} Data taken from county tax rolls, as of January 1, 1946.

^{2/} Includes forest and non-forest land on properties 1,000 acres and larger in size.

Table 4. - Commercial forest area of South Carolina by forest type
and stand size, 1947^{1/}

Forest type	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>
Longleaf pine	47,400	358,300	315,300	221,400	135,000	1,077,400
Loblolly pine	497,700	1,291,500	754,200	821,500	223,400	3,588,300
Shortleaf pine	87,700	553,700	970,300	294,800	218,300	2,124,800
Pond pine	27,800	198,500	104,700	77,900	124,700	533,600
Cypress	54,900	111,100	64,500	17,200	-	247,700
Lowland hdwds.	492,200	1,080,800	495,200	661,400	159,700	2,889,300
Upland hdwds.	64,000	175,800	354,600	264,100	6,000	864,500
Scrub oak	-	-	9,100	542,600	22,200	573,900
All types	1,271,700	3,769,700	3,067,900	2,900,900	889,300	11,899,500
Percent	10.7	31.7	25.8	24.4	7.4	100.0

^{1/} See description of forest types and stand-size classes in the appendix.

Table 5. - Net volume^{1/} of saw timber in South Carolina by species and stand size, 1947

SOUND TREES (in thousand board feet)

Species ^{2/}	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
Softwoods:						
Longleaf pine	357,300	1,397,100	246,300	191,900	67,100	2,259,700
Loblolly pine	3,900,000	4,963,600	613,100	396,600	43,500	9,916,800
Shortleaf pine	421,700	1,453,000	619,400	68,700	18,000	2,580,800
Other pines	333,000	905,000	122,400	81,600	4,000	1,446,000
Total	5,012,000	8,718,700	1,601,200	738,800	132,600	16,203,300
Cypress	546,800	666,100	65,400	13,900	-	1,292,200
Hemlock	32,400	400	-	-	-	32,800
Cedar	1,400	13,600	12,500	3,900	-	31,400
Total sftwds.	5,592,600	9,398,800	1,679,100	756,600	132,600	17,559,700
Hardwoods:						
Tupelo	1,039,900	2,172,200	131,400	48,000	6,100	3,397,600
Sweetgum	1,150,500	1,055,000	151,600	62,600	5,200	2,424,900
Soft maple	202,200	445,100	39,500	1,900	-	688,700
Yellow-poplar	438,800	574,000	160,200	30,900	3,800	1,207,700
Other soft hdwds.	63,000	86,500	10,400	-	17,100	177,000
Total	2,894,400	4,332,800	493,100	143,400	32,200	7,895,900
Red oaks	866,000	762,800	235,000	62,800	3,900	1,930,500
White oaks	253,600	338,800	76,400	24,000	2,800	695,600
Hickory	208,300	237,900	56,300	22,200	-	524,700
Ash	211,300	163,900	41,900	-	-	417,100
Sycamore, birch	205,000	230,000	48,900	13,000	2,500	499,400
Total	1,744,200	1,733,400	458,500	122,000	9,200	4,067,300
Total hdwds.	4,638,600	6,066,200	951,600	265,400	41,400	11,963,200
All sound trees	10,231,200	15,465,000	2,630,700	1,022,000	174,000	29,522,900
Percent	34.6	52.4	8.9	3.5	0.6	100.0

^{1/} Log scale, International 1/4-inch rule.

^{2/} See appendix for species combined with others.

Table 6. - Net volume^{1/} of saw timber in South Carolina by species and
diameter class, 1947

SOUND TREES						
Species	10-12 inches ^{2/}	14-18 inches	20-24 inches	26 + inches	All diameters	
	<u>Thousand</u> <u>bd. ft.</u>	<u>Thousand</u> <u>bd. ft.</u>	<u>Thousand</u> <u>bd. ft.</u>	<u>Thousand</u> <u>bd. ft.</u>	<u>Thousand</u> <u>bd. ft.</u>	<u>Percent</u>
Softwoods:						
Longleaf pine	1,206,600	894,100	150,200	8,800	2,259,700	7.7
Loblolly pine	3,072,400	4,575,400	1,576,700	692,300	9,916,800	33.6
Shortleaf pine	1,630,300	816,600	130,000	3,900	2,580,800	8.7
Other pines	524,800	804,000	100,700	16,500	1,446,000	4.9
Total	6,434,100	7,090,100	1,957,600	721,500	16,203,300	54.9
Cypress	407,300	534,500	165,800	184,600	1,292,200	4.4
Hemlock	1,900	2,000	17,600	11,300	32,800	0.1
Cedar	24,300	7,100	-	-	31,400	0.1
Total sftwds.	6,867,600	7,633,700	2,141,000	917,400	17,559,700	59.5
Hardwoods:						
Tupelo	813,100	1,989,700	446,800	148,000	3,397,600	11.5
Sweetgum	438,600	1,275,900	479,700	230,700	2,424,900	8.2
Soft maple	136,200	412,600	100,900	39,000	688,700	2.3
Yellow-poplar	170,300	678,600	290,900	67,900	1,207,700	4.1
Other soft hdwds.	37,600	94,600	40,700	4,100	177,000	0.6
Total	1,595,800	4,451,400	1,359,000	489,700	7,895,900	26.7
Red oaks	298,000	802,100	491,400	339,000	1,930,500	6.5
White oaks	145,600	357,600	112,500	79,900	695,600	2.4
Hickory	90,000	282,500	110,100	42,100	524,700	1.8
Ash	74,000	157,700	107,100	78,300	417,100	1.4
Sycamore, birch	102,800	273,000	88,100	35,500	499,400	1.7
Total	710,400	1,872,900	909,200	574,800	4,067,300	13.8
Total hdwds.	2,306,200	6,324,300	2,268,200	1,064,500	11,963,200	40.5
All sound trees	9,173,800	13,958,000	4,409,200	1,981,900	29,522,900	100.0
Percent	31.1	47.3	14.9	6.7	100.0	

^{1/} Log scale, International 1/4-inch rule.

^{2/} Ten-inch hardwoods not included.

Table 7. - Net volume^{1/} of saw timber in South Carolina
by forest type and stand size, 1947

SOUND TREES (in thousand board feet)

Forest type ^{2/}	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
Longleaf pine	332,400	1,446,200	292,300	90,800	64,300	2,226,000
Loblolly pine	4,656,700	5,405,600	643,400	340,600	25,400	11,071,700
Shortleaf pine	596,900	1,790,900	802,400	48,400	19,000	3,257,600
Pond pine	232,000	743,200	85,000	24,400	34,800	1,119,400
Cypress	566,300	794,900	27,600	2,600	-	1,391,400
Lowland hdwds.	3,600,200	4,847,700	508,600	351,200	26,400	9,334,100
Upland hdwds.	246,700	436,500	268,700	65,100	4,100	1,021,100
Scrub oak	-	-	2,700	98,900	-	101,600
All types	10,231,200	15,465,000	2,630,700	1,022,000	174,000	29,522,900
Percent	34.6	52.4	8.9	3.5	0.6	100.0

^{1/} Log scale, International 1/4-inch rule.

^{2/} See description of forest types and stand-size classes in the appendix.

Table 8. - Net volume^{1/} of all trees in South Carolina by species and stand size,
1947

SOUND TREES (in thousand cords)

Species	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
Softwoods:						
Longleaf pine	944	5,136	1,789	972	187	9,028
Loblolly pine	9,625	15,958	4,961	1,840	178	32,562
Shortleaf pine	1,156	6,364	5,687	499	89	13,795
Other pines	843	2,983	1,204	288	109	5,427
Total	12,568	30,441	13,641	3,599	563	60,812
Cypress	1,429	2,543	685	85	-	4,742
Hemlock	77	1	1	-	-	79
Cedar	10	152	148	30	5	345
Total sftwds.	14,084	33,137	14,475	3,714	568	65,978
Hardwoods:						
Tupelo	3,611	9,702	1,412	223	21	14,969
Sweetgum	3,565	4,621	1,823	334	41	10,384
Soft maple	832	2,363	516	14	-	3,725
Yellow-poplar	1,209	1,981	772	117	16	4,095
Other soft hdwds.	225	383	412	10	40	1,070
Total	9,442	19,050	4,935	698	118	34,243
Red oaks	2,635	2,970	1,681	343	17	7,646
White oaks	860	1,760	1,141	309	14	4,084
Hickory	669	965	727	121	52	2,534
Ash	784	856	419	17	-	2,076
Sycamore, birch	795	1,127	853	139	36	2,950
Holly, dogwood	180	251	117	15	3	566
Total	5,923	7,929	4,938	944	122	19,856
Total hdwds.	15,365	26,979	9,873	1,642	240	54,099
All sound trees	29,449	60,116	24,348	5,356	808	120,077
Percent	24.5	50.1	20.3	4.4	0.7	100.0

CULL TREES (in thousand cords)

Softwoods	240	829	1,222	449	288	3,028
Hardwoods	7,779	12,876	5,105	2,788	298	28,846
All cull trees	8,019	13,705	6,327	3,237	586	31,874

^{1/} Sound wood and bark.

Table 9.-Net volume^{1/} of all trees in South Carolina by species and diameter class, 1947

SOUND TREES (in thousand cords)

Species	Pole trees		Saw-timber trees				All diameters
	6 inches	8 inches	10 inches	12 inches	14-18 inches	20 + inches	
Softwoods:							
Longleaf pine	837	2,019	1,926	1,665	2,214	367	9,028
Loblolly pine	3,245	3,950	4,139	4,871	11,220	5,137	32,562
Shortleaf pine	3,457	3,406	2,699	1,952	1,988	293	13,795
Other pines	684	921	766	795	1,988	273	5,427
Total	8,223	10,296	9,530	9,283	17,410	6,070	60,812
Cypress	526	777	570	688	1,357	824	4,742
Hemlock	4	3	2	4	5	61	79
Cedar	189	60	48	28	20	-	345
Total softwoods	8,942	11,136	10,150	10,003	18,792	6,955	65,978
Hardwoods:							
Tupelo	1,183	2,012	2,887	2,278	5,101	1,508	14,969
Sweetgum	1,196	1,381	1,386	1,318	3,391	1,712	10,384
Soft maple	502	678	788	377	1,040	340	3,725
Yellow-poplar	221	301	408	506	1,793	866	4,095
Other soft hdwds.	296	116	206	103	238	111	1,070
Total	3,398	4,488	5,675	4,582	11,563	4,537	34,243
Red oaks	1,012	979	859	812	1,983	2,001	7,646
White oaks	715	839	777	397	889	467	4,084
Hickory	458	361	397	247	703	368	2,534
Ash	318	397	273	226	418	444	2,076
Sycamore, birch	639	568	492	278	681	292	2,950
Holly, dogwood	189	164	96	42	70	5	566
Total	3,331	3,308	2,894	2,002	4,744	3,577	19,856
Total hardwoods	6,729	7,796	8,569	6,584	16,307	8,114	54,099
All sound trees	15,671	18,932	18,719	16,587	35,099	15,069	120,077
Percent	13.1	15.8	15.6	13.8	29.2	12.5	100.0

CULL TREES (in thousand cords)

Softwoods	410	353	701	484	672	408	3,028
Hardwoods	2,607	3,097	2,817	4,195	8,612	7,518	28,846
All cull trees	3,017	3,450	3,518	4,679	9,284	7,926	31,874

^{1/} Sound wood and bark.

Table 10. - Net volume^{1/} of all trees in South Carolina by species and class of material, 1947

Species	Saw-timber trees		Pole timber trees	Total sound-tree volume		Total cull- tree volume
	Sawlogs	Upper stems				
	<u>Thousand cords</u>	<u>Thousand ccrds</u>	<u>Thousand cords</u>	<u>Thousand cords</u>	<u>Percent</u>	<u>Thousand cords</u>
Softwoods:						
Longleaf pine	4,536	1,636	2,856	9,028	7.5	154
Loblolly pine	18,939	6,428	7,195	32,562	27.1	1,019
Shortleaf pine	4,995	1,937	6,863	13,795	11.5	824
Other pines	2,839	983	1,605	5,427	4.5	556
Total	31,309	10,984	18,519	60,812	50.6	2,553
Cypress	2,757	682	1,303	4,742	4.0	371
Hemlock	54	18	7	79	0.1	28
Cedar	76	20	249	345	0.3	76
Total sftwds.	34,196	11,704	20,078	65,978	55.0	3,028
Hardwoods:						
Tupelo	6,398	2,489	6,082	14,969	12.5	8,795
Sweetgum	4,704	1,717	3,963	10,384	8.6	2,041
Soft maple	1,262	495	1,968	3,725	3.1	3,096
Yellow-poplar	2,311	854	930	4,095	3.4	635
Other soft hdwds.	324	128	618	1,070	0.9	534
Total	14,999	5,683	13,561	34,243	28.5	15,101
Red oaks	3,454	1,342	2,850	7,646	6.4	5,416
White oaks	1,256	497	2,331	4,084	3.4	2,912
Hickory	946	372	1,216	2,534	2.1	995
Ash	799	289	988	2,076	1.7	801
Sycamore, birch	891	360	1,699	2,950	2.4	1,628
Holly, dogwood	117	-	449	566	0.5	262
Scrub oaks	-	-	-	-	-	1,731
Total	7,463	2,860	9,533	19,856	16.5	13,745
Total hdwds.	22,462	8,543	23,094	54,099	45.0	28,846
Total all species	56,658	20,247	43,172	120,077	100.0	31,874
Percent	47.2	16.9	35.9	100.0		

^{1/} Sound wood and bark.

Table 11. - Net volume^{1/} of all trees in South Carolina by forest
type and stand size, 1947

SOUND TREES (in thousand cords)

Forest type	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
Longleaf pine	881	5,438	2,018	400	155	8,892
Loblolly pine	12,941	19,631	6,362	1,719	187	40,840
Shortleaf pine	1,780	7,997	7,822	482	102	18,183
Pond pine	659	2,454	592	108	188	4,001
Cypress	1,562	3,192	554	44	-	5,352
Lowland hardwoods	10,815	19,593	4,806	1,538	158	36,910
Upland hardwoods	811	1,811	2,171	408	14	5,215
Scrub oak	-	-	23	657	4	684
All types	29,449	60,116	24,348	5,356	808	120,077

CULL TREES (in thousand cords)

Longleaf pine	74	105	189	482	52	902
Loblolly pine	1,649	2,528	1,152	695	220	6,244
Shortleaf pine	292	1,266	1,480	134	108	3,280
Pond pine	150	279	153	44	103	729
Cypress	665	904	41	10	-	1,620
Lowland hardwoods	4,634	7,855	2,271	1,440	64	16,264
Upland hardwoods	555	768	1,004	178	21	2,526
Scrub oak	-	-	37	254	18	309
All types	8,019	13,705	6,327	3,237	586	31,874

^{1/} Sound wood and bark.

Table 12. - Average volume^{1/} per acre of saw timber in South Carolina by forest type and stand size,^{2/} 1947

SOUND TREES (in board feet)												
Forest type	Large saw-timber stands		Small saw-timber stands		Pole timber stands		Seedling & sapling stands		Poorly stocked stands & unstocked areas		All stands	
	S ^{2/}	H ^{2/}	S	H	S	H	S	H	S	H	S	H
Longleaf pine	6,750	257	3,994	42	921	6	391	20	423	54	2,028	38
Loblolly pine	7,921	1,435	3,636	550	685	168	354	61	106	8	2,639	447
Shortleaf pine	4,712	2,099	2,650	584	604	223	134	30	79	8	1,187	346
Pond pine	7,360	984	3,645	99	715	97	287	26	242	37	1,978	119
Cypress	5,018	5,290	3,947	3,210	274	154	152	-	-	-	2,964	2,652
Lowland hardwoods	866	6,449	554	3,932	219	808	266	265	7	159	453	2,777
Upland hardwoods	166	3,688	250	2,233	241	517	203	43	571	111	228	953
Scrub oak	-	-	-	-	-	300	158	24	-	-	149	28
All types	4,398	3,648	2,493	1,609	547	310	261	91	149	47	1,476	1,005

^{1/} Log scale, International 1/4-inch rule.

^{2/} S - softwoods, H - hardwoods.

Table 13. - Average volume^{1/} per acre of all trees in South Carolina by forest type and stand size, 1947

SOUND TREES (in standard cords)

Forest type	Large saw-timber stands		Small saw-timber stands		Pole timber stands		Seedling & sapling stands		Poorly stocked stands & unstocked areas		All stands	
	S ^{2/}	H ^{2/}	S	H	S	H	S	H	S	H	S	H
Longleaf pine	17.1	1.5	14.5	0.6	6.1	0.3	1.6	0.2	1.0	0.1	7.8	0.4
Loblolly pine	20.0	6.0	12.3	2.9	6.7	1.7	1.7	0.4	0.7	0.1	9.1	2.3
Shortleaf pine	12.4	7.9	11.1	3.3	6.0	2.1	1.4	0.3	0.4	0.1	6.4	2.2
Pond pine	18.3	5.4	11.5	0.8	5.0	0.7	1.3	0.1	1.3	0.2	6.7	0.8
Cypress	11.4	17.0	12.7	16.0	6.8	1.8	2.6	-	-	-	10.2	11.4
Lowland hdwds.	2.1	19.8	1.8	16.3	0.6	9.1	1.0	1.3	3/	1.0	1.4	11.4
Upland hdwds.	0.7	12.0	1.1	9.3	1.1	5.1	0.8	0.8	1.9	0.4	1.0	5.1
Scrub oak	-	-	-	-	-	2.5	1.0	0.2	0.2	-	0.9	0.3
All types	11.1	12.1	8.8	7.2	4.7	3.2	1.3	0.6	0.6	0.3	5.5	4.5

CULL TREES (in standard cords)

Longleaf pine	0.1	1.4	0.1	0.2	0.1	0.5	0.1	2.1	3/	0.3	0.1	0.8
Loblolly pine	0.2	3.1	0.2	1.8	0.6	0.9	0.3	0.5	0.9	0.1	0.3	1.4
Shortleaf pine	0.6	2.8	0.5	1.8	0.6	0.9	0.2	0.2	0.2	0.3	0.5	1.1
Pond pine	0.2	5.2	0.5	1.0	0.3	1.1	0.6	3/	0.3	0.5	0.4	1.0
Cypress	0.8	11.3	1.3	6.8	0.3	0.3	0.6	-	-	-	0.9	5.6
Lowland hdwds.	0.1	9.4	3/	7.2	0.1	4.5	3/	2.1	3/	0.4	3/	5.6
Upland hdwds.	0.1	8.6	-	4.4	0.1	2.7	3/	0.6	2.0	1.6	0.1	2.9
Scrub oak	-	-	-	-	-	4.1	0.1	0.4	-	0.8	0.1	0.5
All types	0.2	6.1	0.2	3.4	0.4	1.7	0.2	1.0	0.3	0.3	0.3	2.4

^{1/} Sound wood and bark.

^{2/} S - Softwoods, H - Hardwoods.

^{3/} Less than 0.05 cords per acre.

Table 14. - Average volume ^{1/} per acre of pole-timber trees in South Carolina
by forest type and stand size, 1947

SOUND TREES (in standard cords)												
Forest type	Large saw-timber stands		Small saw-timber stands		Pole timber stands		Seedling & sapling stands		Poorly stocked stands & unstocked areas		All stands	
	S ^{2/}	H ^{2/}	S	H	S	H	S	H	S	H	S	H
Longleaf pine	0.8	0.8	3.7	0.3	3.5	0.2	0.5	<u>3/</u>	0.2	<u>3/</u>	2.4	0.2
Loblolly pine	0.7	2.5	2.5	1.6	4.8	1.2	0.8	0.2	0.4	0.1	2.2	1.2
Shortleaf pine	1.2	2.7	4.0	1.8	4.3	1.5	1.0	0.2	0.2	<u>3/</u>	3.2	1.3
Pond pine	0.3	2.6	1.7	0.6	2.6	0.7	0.5	-	0.5	0.1	1.4	0.5
Cypress	0.3	3.1	4.1	5.3	6.1	1.4	2.2	-	-	-	3.6	3.4
Lowland hdwds.	0.1	3.4	0.2	6.1	0.1	6.9	0.3	0.6	-	0.6	0.2	4.2
Upland hdwds.	0.3	2.8	0.3	3.5	0.4	3.7	0.2	0.7	0.7	0.2	0.3	2.7
Scrub oak	-	-	-	-	-	1.7	0.5	0.2	0.2	-	0.5	0.2
All types	0.5	2.8	2.1	2.9	3.2	2.4	0.6	0.3	0.3	0.2	1.7	1.9

CULL TREES (in standard cords)												
Longleaf pine	<u>3/</u>	0.5	<u>3/</u>	0.1	<u>3/</u>	0.3	<u>3/</u>	0.2	-	0.3	<u>3/</u>	0.2
Loblolly pine	<u>3/</u>	0.8	<u>3/</u>	0.7	0.2	0.5	0.1	0.3	0.1	<u>3/</u>	0.1	0.5
Shortleaf pine	0.1	0.9	0.2	0.7	0.2	0.5	0.1	0.1	0.1	0.1	0.2	0.5
Pond pine	-	1.2	0.1	0.3	0.1	0.5	0.1	-	-	0.1	0.1	0.3
Cypress	0.1	1.2	0.1	1.4	0.3	0.3	0.6	-	-	-	0.2	0.9
Lowland hdwds.	<u>3/</u>	1.6	<u>3/</u>	1.7	-	1.9	<u>3/</u>	0.5	<u>3/</u>	0.2	<u>3/</u>	1.4
Upland hdwds.	-	1.4	-	1.5	<u>3/</u>	1.2	<u>3/</u>	0.4	-	0.4	<u>3/</u>	1.0
Scrub oak	-	-	-	-	-	3.0	<u>3/</u>	0.3	-	0.7	<u>3/</u>	0.4
All types	<u>3/</u>	1.2	0.1	1.0	0.1	0.8	<u>3/</u>	0.3	<u>3/</u>	0.1	0.1	0.7

^{1/} Sound wood and bark.

^{2/} S - Softwoods, H - Hardwoods.

^{3/} Less than 0.05 cords per acre.

Table 15. - Net annual growth^{1/} of saw timber^{2/} in South Carolina
by stand size and species group, 1946

(in thousand board feet)

Stand size	Softwoods	Gums, soft maple and yellow-poplar	Other hardwoods	All species
Large saw timber	192,900	90,000	57,600	340,500
Small saw timber	570,700	223,500	86,200	880,400
Pole timber	107,300	29,700	26,400	163,400
Other stand sizes	59,600	7,300	5,900	72,800
All stands	930,500	350,500	176,100	1,457,100

^{1/} Log scale, International 1/4-inch rule, on sound-tree growing stock.

^{2/} Includes hardwoods 11.0 to 12.9 inches d.b.h.

Table 16. - Net annual growth^{1/} of timber in South Carolina by stand size and species group, 1946

ON SAW-TIMBER TREES (in standard cords)

Stand size	Softwoods		Gums, soft maple and yellow-poplar	Other hardwoods	All species
	Yellow pine	Other			
Large saw timber	423,900	23,900	238,300	158,700	844,800
Small saw timber	1,554,500	51,400	623,000	260,900	2,489,800
Pole timber	765,200	15,200	136,200	130,800	1,047,400
Other stand sizes	268,400	1,100	18,100	22,300	309,900
All stands	3,012,000	91,600	1,015,600	572,700	4,691,900

ON POLE TIMBER TREES (in standard cords)

Large saw timber.	- 2,800	- 100	9,300	19,400	25,800
Small saw timber	37,000	19,400	- 11,900	57,200	101,700
Pole timber	396,100	20,700	113,400	134,200	664,400
Other stand sizes	50,000	2,600	10,100	42,900	105,600
All stands	480,300	42,600	120,900	253,700	897,500
Saw-timber and pole timber trees ^{2/}	3,492,300	134,200	1,136,500	826,400	5,589,400

^{1/} Sound wood and bark..

^{2/} Excluding cull trees.

Table 17. - Average net growth^{1/} of saw timber per acre in South Carolina
by forest type and stand size, 1947

(in board feet)

Forest type	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Other stand sizes	All stands
Longleaf pine	227	294	113	20	148
Loblolly pine	382	293	73	27	181
Shortleaf pine	200	182	69	10	90
Pond pine	353	239	64	20	128
Cypress	319	332	38	5	230
Lowland hardwoods	248	258	56	22	154
Upland hardwoods	117	119	48	18	58
All types	295	257	69	21	137

^{1/} Log scale, International 1/4-inch rule, on sound-tree growing stock.

Applies only to stands in which there was no cutting during 1947.

Table 18. - Average net growth^{1/} of timber per acre in South Carolina by forest type and stand size, 1947

(in cords)					
Forest type	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Other stand sizes	All stands
Longleaf pine	0.6	0.9	0.6	0.1	0.6
Loblolly pine	1.1	0.9	0.8	0.2	0.7
Shortleaf pine	0.7	0.8	0.7	0.1	0.6
Pond pine	0.9	0.7	0.5	0.1	0.4
Cypress	0.8	0.9	0.5	0.1	0.7
Lowland hardwoods	0.7	0.7	0.6	0.1	0.5
Upland hardwoods	0.3	0.4	0.3	0.1	0.3
All types	0.8	0.8	0.7	0.1	0.6

^{1/} Sound wood and bark, on the entire sound-tree growing stock, excluding cull trees. Applies only to stands in which there was no cutting during 1947.

Table 19. - Commodity drain^{1/} from saw timber in South Carolina by commodity and species group, 1946

SOUND TREES					
Commodity	Softwoods	Gums, soft maple and yellow-poplar	Other hardwoods	All species	
	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Percent</u>
Lumber	748,931	200,259	65,261	1,014,451	66.7
Veneer bolts	18,581	127,814	3,093	149,488	9.8
Cooperage bolts	-	-	3,768	3,768	0.3
Pulpwood bolts	230,385	16,841	-	247,226	16.3
Poles	21,799	-	-	21,799	1.4
Piling	3,271	-	-	3,271	0.2
Posts	1,043	112	3,113	4,268	0.3
Mine timbers	595	-	-	595	<u>3/</u>
Crossties (hewn)	6,106	3,830	533	10,469	0.7
Shingles	150	-	-	150	<u>3/</u>
Fuelwood	39,323	3,785	13,185	56,293	3.7
Other products ^{2/}	602	7,303	515	8,420	0.6
All commodities	1,070,786	359,944	89,468	1,520,198	100.0

^{1/} Log scale, International 1/4-inch rule.

^{2/} Handles, shuttle blocks, hardwood dimension, and miscellaneous farm use.

^{3/} Less than 0.05 percent.

Table 20. - Commodity drain^{1/} from timber in South Carolina by commodity and species groups, 1946

SOUND TREES						
Commodity	Softwoods		Gums, soft maple and yellow-poplar	Other hardwoods	All species	
	Yellow pine	Other				
	<u>Standard cords</u>	<u>Standard cords</u>	<u>Standard cords</u>	<u>Standard cords</u>	<u>Standard cords</u>	<u>Percent</u>
Lumber	1,645,200	163,600	486,500	158,500	2,453,800	48.8
Veneer bolts	50,800	300	294,000	7,100	352,200	7.0
Cooperage bolts	-	-	-	10,600	10,600	0.2
Pulpwood bolts	886,100	-	93,500	-	979,600	19.5
Poles	59,800	-	-	-	59,800	1.2
Piling	8,900	-	-	-	8,900	0.2
Posts	6,200	16,600	12,500	15,100	50,400	1.0
Mine timbers	3,300	-	-	-	3,300	0.1
Crossties (hewn)	13,200	-	11,800	1,700	26,700	0.5
Shingles	400	-	-	-	400	<u>3/</u>
Fuelwood	369,400	500	212,400	434,600	1,016,900	20.2
Other products ^{2/}	30,000	1,100	26,800	9,900	67,800	1.3
All commodities	3,073,300	182,100	1,137,500	637,500	5,030,400	100.0
CULL TREES						
All commodities	199,500	400	113,000	251,100	564,000	-

1/ Sound wood and bark.

2/ Handles, shuttle blocks, hardwood dimension, and miscellaneous farm use.

3/ Less than 0.05 percent.

Table 21. - Net change^{1/} in saw-timber growing stock^{2/} in South Carolina by species group, 1946

SOUND TREES				
Item	Softwoods	Gums, soft maple and yellow-poplar	Other hardwoods	Total
	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>
Growing stock, Jan. 1, 1946	17,700,000	7,905,300	3,980,700	29,586,000
Net growth	930,500	350,500	176,100	1,457,100
Commodity drain	1,070,800	359,900	89,500	1,520,200
Net change	- 140,300	-9,400	+ 86,600	- 63,100
Growing stock, Jan. 1, 1947	17,559,700	7,895,900	4,067,300	29,522,900
Percent change	- 0.8	- 0.1	+ 2.2	- 0.2

^{1/} Log scale, International 1/4-inch rule.

^{2/} Includes hardwoods 11.0 to 12.9 inches d.b.h.

Table 22. - Net change in growing stock of all timber^{1/} in South Carolina by species group, 1946

ALL TIMBER (in standard cords)

Item	Softwoods	Gums, soft maple and yellow-poplar	Other hardwoods	Total
Growing stock, Jan. 1, 1946	65,606,600	34,244,000	19,667,000	119,517,600
Net growth:				
On trees 5.0" and larger, Jan. 1, 1946	3,288,500	973,800	694,100	4,956,400
Trees recruiting to 5.0" in 1946	338,000	162,700	132,300	633,000
Total	3,626,500	1,136,500	826,400	5,589,400
Commodity drain	3,255,400	1,137,500	637,500	5,030,400
Net change	+ 371,100	- 1,000	+ 188,900	+ 559,000
Growing stock, Jan. 1, 1947	65,977,700	34,243,000	19,855,900	120,076,600
Percent change	+ 0.6	- 0.0	+ 1.0	+ 0.5

^{1/} The entire sound-tree growing stock, excluding cull trees.

Table 1a. - Gross area^{1/} of the Southern Coastal
Plain by broad use class, 1947

Class of use	Area	
	<u>Acres</u>	<u>Percent</u>
Forest:		
Commercial	3,026,300	56.9
Withdrawn	5,300	0.1
Non-productive	600	<u>2/</u>
Total forest	3,032,200	57.0
Non-forest:		
Idle	571,300	10.8
Agriculture	1,234,800	23.2
Marsh	230,300	4.3
Dune and beach	11,900	0.2
Urban and other ^{3/}	79,100	1.5
Total non-forest	2,127,400	40.0
Total land	5,159,600	97.0
Total water	158,800	3.0
All classes	5,318,400	100.0

^{1/} From U. S. Bureau of the Census, 1940.

^{2/} Less than 0.05 percent.

^{3/} Includes urban, suburban residential, and rural industrial areas, rights-of-way, cemeteries, schools, etc.

Table 2a. - Ownership of land in the Southern Coastal Plain, 1947

Class of ownership	All land		Commercial forest land	
	<u>Acres</u>	<u>Percent</u>	<u>Acres</u>	<u>Percent</u>
Public:				
National forest	-	-	-	-
Indian	-	-	-	-
Other federal	19,100	0.4	1,900	0.1
Total federal	19,100	0.4	1,900	0.1
State	53,700	1.0	21,000	0.6
County and municipal	6,200	0.1	2,600	0.1
Total public	79,000	1.5	25,500	0.8
Private	5,080,600	98.5	3,000,800	99.2
All classes	5,159,600	100.0	3,026,300	100.0

Table 3a. - Ownership of all private properties of 1,000 acres or more in the Southern Coastal Plain, 1946^{1/}

Class of ownership	Distribution of all land ^{2/}	
	<u>Acres</u>	<u>Percent</u>
Corporate:		
Pulp company	188,600	13.5
Lumber company	178,100	12.7
Other forest industry	32,900	2.3
Bank, loan, and insurance	8,000	0.6
Railroad	17,600	1.3
Other	82,600	5.9
Total corporate	507,800	36.3
Individual:		
Estate, club, preserve	218,400	15.7
Farmer	401,400	28.7
Lumberman	112,100	8.0
Other forest industry	6,900	0.5
Other individual	141,200	10.1
Total individual	880,000	63.0
Unknown	9,600	0.7
All classes	1,397,400	100.0

^{1/} Data taken from county tax rolls, as of January 1, 1946.

^{2/} Includes forest and non-forest land on properties 1,000 acres and larger in size.

Table 4a. - Commercial forest area of the Southern Coastal Plain
by forest type and stand size, 1947^{1/}

Forest type	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>
Longleaf pine	18,800	193,100	159,500	91,200	62,000	524,600
Loblolly pine	156,800	268,400	195,600	101,600	75,900	798,300
Shortleaf pine	3,300	24,900	10,800	200	3,300	42,500
Pond pine	14,100	57,500	60,500	14,900	114,400	261,400
Cypress	16,000	21,100	64,500	-	-	101,600
Lowland hdwds.	118,000	375,200	151,800	83,000	51,200	779,200
Upland hdwds.	2,000	13,200	36,600	104,300	500	156,600
Scrub oak	-	-	9,100	330,800	22,200	362,100
All types	329,000	953,400	688,400	726,000	329,500	3,026,300
Percent	10.9	31.5	22.7	24.0	10.9	100.0

^{1/} See description of forest types and stand-size classes in the appendix.

Table 5a. - Net volume^{1/} of saw timber in the Southern Coastal Plain by species
and stand size, 1947

SOUND TREES (in thousand board feet)

Species ^{2/}	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
Softwoods:						
Longleaf pine	168,600	695,900	117,900	80,400	23,300	1,086,100
Loblolly pine	1,229,000	901,800	145,500	87,100	22,500	2,385,900
Shortleaf pine	25,300	69,300	7,700	7,700	-	110,000
Other pines	154,500	251,200	66,600	49,100	4,000	525,400
Total	1,577,400	1,918,200	337,700	224,300	49,800	4,107,400
Cypress	163,300	210,700	50,000	-	-	424,000
Cedar	-	-	-	700	-	700
Total sftwds.	1,740,700	2,128,900	387,700	225,000	49,800	4,532,100
Hardwoods:						
Tupelo	321,900	719,800	40,400	3,600	2,500	1,088,200
Sweetgum	322,500	333,500	44,300	10,100	1,200	711,600
Soft maple	38,500	153,200	13,200	1,700	-	206,600
Yellow-poplar	165,000	145,800	10,200	-	-	321,000
Other soft hdwds.	12,600	2,500	1,300	-	-	16,400
Total	860,500	1,354,800	109,400	15,400	3,700	2,343,800
Red oaks	269,000	259,400	46,800	17,500	1,900	594,600
White oaks	32,500	58,100	15,500	3,300	1,300	110,700
Hickory	39,700	53,900	9,100	7,200	-	109,900
Ash	56,300	53,100	6,800	-	-	116,200
Sycamore, birch	32,200	23,900	11,900	700	-	68,700
Total	429,700	448,400	90,100	28,700	3,200	1,000,100
Total hdwds.	1,290,200	1,803,200	199,500	44,100	6,900	3,343,900
All sound trees	3,030,900	3,932,100	587,200	269,100	56,700	7,876,000
Percent	38.5	49.9	7.5	3.4	0.7	100.0

^{1/} Log scale, International 1/4-inch rule.

^{2/} See appendix for species combined with others.

Table 6a. - Net volume^{1/} of saw timber in the Southern Coastal Plain
by species and diameter class, 1947

SOUND TREES						
Species	10-12 inches ^{2/}	14-18 inches	20-24 inches	26 + inches	All diameters	
	<u>Thousand</u> <u>bd. ft.</u>	<u>Thousand</u> <u>bd. ft.</u>	<u>Thousand</u> <u>bd. ft.</u>	<u>Thousand</u> <u>bd. ft.</u>	<u>Thousand</u> <u>bd. ft.</u>	<u>Percent</u>
Softwoods:						
Longleaf pine	637,000	344,900	95,400	8,800	1,086,100	13.8
Loblolly pine	591,000	931,500	554,500	308,900	2,385,900	30.3
Shortleaf pine	52,400	53,700	-	3,900	110,000	1.4
Other pines	180,100	274,200	54,600	16,500	525,400	6.7
Total	1,460,500	1,604,300	704,500	338,100	4,107,400	52.2
Cypress	111,000	190,000	72,900	50,100	424,000	5.3
Cedar	700	-	-	-	700	^{3/}
Total sftwds.	1,572,200	1,794,300	777,400	388,200	4,532,100	57.5
Hardwoods:						
Tupelo	287,500	666,100	113,300	21,300	1,088,200	13.8
Sweetgum	144,000	370,800	179,800	17,000	711,600	9.1
Soft maple	31,400	125,300	42,700	7,200	206,600	2.6
Yellow-poplar	46,300	142,900	125,900	5,900	321,000	4.1
Other soft hwdws.	3,800	5,200	3,300	4,100	16,400	0.2
Total	513,000	1,310,300	465,000	55,500	2,343,800	29.8
Red oaks	88,200	241,700	149,100	115,600	594,600	7.5
White oaks	25,600	64,500	15,400	5,200	110,700	1.4
Hickory	21,200	68,900	18,200	1,600	109,900	1.4
Ash	17,600	48,800	27,100	22,700	116,200	1.5
Sycamore, birch	25,100	34,800	5,000	3,800	68,700	0.9
Total	177,700	458,700	214,800	148,900	1,000,100	12.7
Total hwdws.	690,700	1,769,000	679,800	204,400	3,343,900	42.5
All sound trees	2,262,900	3,563,300	1,457,200	592,600	7,876,000	100.0
Percent	28.7	45.3	18.5	7.5	100.0	

^{1/} Log scale, International 1/4-inch rule.

^{2/} Ten-inch hardwoods not included.

^{3/} Less than 0.05 percent.

Table 7a. - Net volume^{1/} of saw timber in the Southern Coastal Plain
by forest type and stand size, 1947

SOUND TREES (in thousand board feet)

Forest type ^{2/}	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
Longleaf pine	169,000	709,100	152,200	80,400	20,700	1,131,400
Loblolly pine	1,622,000	1,162,400	170,400	29,500	9,800	2,994,100
Shortleaf pine	34,100	76,700	8,900	-	400	120,100
Pond pine	98,300	208,300	61,400	13,200	23,300	404,500
Cypress	107,400	157,900	27,600	-	-	292,900
Lowland hdwds.	994,000	1,595,700	140,800	55,000	-	2,785,500
Upland hdwds.	6,100	22,000	23,200	21,600	2,500	75,400
Scrub oak	-	-	2,700	69,400	-	72,100
All types	3,030,900	3,932,100	587,200	269,100	56,700	7,876,000
Percent	38.5	49.9	7.5	3.4	0.7	100.0

^{1/} Log scale, International 1/4-inch rule.

^{2/} See description of forest types and stand-size classes in the appendix.

Table 8a. - Net volume^{1/} of all trees in the Southern Coastal Plain
by species and stand size, 1947

SOUND TREES (in thousand cords)						
Species	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
Softwoods:						
Longleaf pine	443	2,718	815	517	68	4,561
Loblolly pine	2,935	2,941	870	310	92	7,148
Shortleaf pine	70	253	49	25	1	398
Other pines	395	858	270	137	71	1,731
Total	3,843	6,770	2,004	989	232	13,838
Cypress	404	652	603	-	-	1,659
Cedar	1	-	9	7	-	17
Total sftwds.	4,248	7,422	2,616	996	232	15,514
Hardwoods:						
Tupelo	1,226	3,228	451	31	6	4,942
Sweetgum	1,014	1,293	216	40	11	2,574
Soft maple	174	767	233	4	-	1,178
Yellow-poplar	439	445	60	-	-	944
Other soft hdwds.	47	24	38	-	-	109
Total	2,900	5,757	998	75	17	9,747
Red oaks	816	1,035	402	64	6	2,323
White oaks	123	283	166	118	3	693
Hickory	135	195	130	68	1	529
Ash	178	245	120	-	-	543
Sycamore, birch	129	197	157	3	-	486
Holly, dogwood	27	33	22	6	3	91
Total	1,408	1,988	997	259	13	4,665
Total hdwds.	4,308	7,745	1,995	334	30	14,412
All sound trees	8,556	15,167	4,611	1,330	262	29,926
Percent	28.6	50.7	15.4	4.4	0.9	100.0
CULL TREES (in thousand cords)						
Softwoods	43	61	153	51	67	375
Hardwoods	2,004	3,406	1,196	625	98	7,329
All cull trees	2,047	3,467	1,349	676	165	7,704

^{1/} Sound wood and bark.

Table 9a. - Net volume^{1/} of all trees in the Southern Coastal Plain by species and diameter class, 1947

SOUND TREES (in thousand cords)

Species	Pole trees		Saw-timber trees				All diameters
	6 inches	8 inches	10 inches	12 inches	14-18 inches	20 + inches	
Softwoods:							
Longleaf pine	416	1,145	1,068	841	852	239	4,561
Loblolly pine	530	609	799	971	2,275	1,964	7,148
Shortleaf pine	26	76	78	76	134	8	398
Other pines	66	268	267	281	683	166	1,731
Total	1,038	2,098	2,212	2,169	3,944	2,377	13,838
Cypress	265	292	171	171	479	281	1,659
Cedar	10	5	2	-	-	-	17
Total softwoods	1,313	2,395	2,385	2,340	4,423	2,658	15,514
Hardwoods:							
Tupelo	321	672	1,085	808	1,710	346	4,942
Sweetgum	81	249	321	438	990	495	2,574
Soft maple	260	175	215	87	316	125	1,178
Yellow-poplar	-	37	66	139	378	324	944
Other soft hwdws.	17	15	33	11	13	20	109
Total	679	1,148	1,720	1,483	3,407	1,310	9,747
Red oaks	340	266	222	246	595	654	2,323
White oaks	137	170	106	70	159	51	693
Hickory	68	102	76	59	174	50	529
Ash	66	104	70	56	130	117	543
Sycamore, birch	117	87	108	67	86	21	486
Holly, dogwood	23	37	13	1	17	-	91
Total	751	766	595	499	1,161	893	4,665
Total hardwoods	1,430	1,914	2,315	1,982	4,568	2,203	14,412
All sound trees	2,743	4,309	4,700	4,322	8,991	4,861	29,926
Percent	9.2	14.4	15.7	14.4	30.0	16.3	100.0

CULL TREES (in thousand cords)

Softwoods	46	23	104	52	81	69	375
Hardwoods	632	666	709	1,098	2,168	2,056	7,329
All cull trees	678	689	813	1,150	2,249	2,125	7,704

^{1/} Sound wood and bark.

Table 10a. - Net volume^{1/} of all trees in the Southern Coastal Plain by species and class of material, 1947

Species	Saw-timber trees		Pole timber trees	Total sound-tree volume		Total cull- tree volume
	Sawlogs	Upper stems				
	<u>Thousand cords</u>	<u>Thousand cords</u>	<u>Thousand cords</u>	<u>Thousand cords</u>	<u>Percent</u>	<u>Thousand cords</u>
Softwoods:						
Longleaf pine	2,205	795	1,561	4,561	15.2	94
Loblolly pine	4,523	1,486	1,139	7,148	23.9	144
Shortleaf pine	217	79	102	398	1.3	4
Other pines	1,047	350	334	1,731	5.8	78
Total	7,992	2,710	3,136	13,838	46.2	320
Cypress	881	221	557	1,659	5.5	55
Cedar	1	1	15	17	0.1	-
Total sftwds.	8,874	2,932	3,708	15,514	51.8	375
Hardwoods:						
Tupelo	2,055	809	2,078	4,942	16.5	2,517
Sweetgum	1,416	507	651	2,574	8.6	480
Soft maple	380	148	650	1,178	3.9	889
Yellow-poplar	618	223	103	944	3.2	166
Other soft hdwds.	32	12	65	109	0.4	49
Total	4,501	1,699	3,547	9,747	32.6	4,101
Red oaks	1,082	413	828	2,323	7.8	1,554
White oaks	201	79	413	693	2.3	560
Hickory	204	79	246	529	1.8	191
Ash	222	81	240	543	1.8	171
Sycamore, birch	122	52	312	486	1.6	207
Holly, dogwood	18	-	73	91	0.3	45
Scrub oaks	-	-	-	-	-	500
Total	1,849	704	2,112	4,665	15.6	3,228
Total hdwds.	6,350	2,403	5,659	14,412	48.2	7,329
Total all species	15,224	5,335	9,367	29,926	100.0	7,704
Percent	50.9	17.8	31.3	100.0		

^{1/} Sound wood and bark.

Table 11a. - Net volume^{1/} of all trees in the Southern Coastal Plain
by forest type and stand size, 1947

SOUND TREES (in thousand cords)

Forest type	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
Longleaf pine	443	2,864	944	297	45	4,593
Loblolly pine	4,417	4,215	1,282	132	81	10,127
Shortleaf pine	95	281	65	-	1	442
Pond pine	272	726	321	50	123	1,492
Cypress	272	510	554	-	-	1,336
Lowland hardwoods	3,036	6,481	1,230	206	-	10,953
Upland hardwoods	21	90	192	143	8	454
Scrub oak	-	-	23	502	4	529
All types	8,556	15,167	4,611	1,330	262	29,926

CULL TREES (in thousand cords)

Longleaf pine	48	68	48	171	22	357
Loblolly pine	613	792	418	33	39	1,895
Shortleaf pine	4	23	14	-	2	43
Pond pine	95	37	99	2	72	305
Cypress	74	119	41	-	-	234
Lowland hardwoods	1,208	2,382	627	283	-	4,500
Upland hardwoods	5	46	65	45	12	173
Scrub oak	-	-	37	142	18	197
All types	2,047	3,467	1,349	676	165	7,704

^{1/} Sound wood and bark.

Table 12a. - Average volume^{1/} per acre of saw timber in the Southern Coastal Plain
by forest type and stand size, 1947

SOUND TREES (in board feet)

Forest type	Large saw-timber stands		Small saw-timber stands		Pole timber stands		Seedling & sapling stands		Poorly stocked stands & unstocked areas		All stands	
	S ^{2/}	H ^{2/}	S	H	S	H	S	H	S	H	S	H
Longleaf pine	8,409	552	3,602	69	949	5	834	48	290	44	2,096	60
Loblolly pine	8,089	2,255	3,370	961	632	238	232	58	116	13	2,917	833
Shortleaf pine	10,142	253	2,753	327	552	264	-	-	130	-	2,544	278
Pond pine	5,699	1,278	3,331	293	849	168	884	-	180	24	1,365	183
Cypress	3,913	2,777	4,291	3,212	274	154	-	-	-	-	1,681	1,201
Lowland hardwoods	1,164	7,262	474	3,779	198	730	399	263	39	8	485	3,089
Upland hardwoods	-	3,112	44	1,622	208	427	189	19	<u>3/</u>	<u>3/</u>	191	291
Scrub oak	-	-	-	-	-	300	179	30	-	-	164	35
All types	5,290	3,922	2,233	1,891	563	290	310	61	151	21	1,498	1,105

^{1/} Log scale, International 1/4-inch rule.

^{2/} S - softwoods, H - hardwoods.

^{3/} Included with lowland hardwood type due to small acreage.

Table 13a. - Average volume^{1/} per acre of all trees in the Southern Coastal Plain by forest type and stand size, 1947

SOUND TREES (in standard cords)

Forest type	Large saw-timber stands		Small saw-timber stands		Pole timber stands		Seedling & sapling stands		Poorly stocked stands & unstocked areas		All stands	
	S ^{2/}	H ^{2/}	S	H	S	H	S	H	S	H	S	H
Longleaf pine	20.9	2.5	13.9	1.0	5.8	0.2	3.0	0.3	0.6	0.1	8.2	0.5
Loblolly pine	19.9	8.3	11.5	4.2	4.4	2.2	1.0	0.3	1.0	0.1	9.0	3.6
Shortleaf pine	26.8	2.3	9.8	1.5	4.2	1.9	-	-	0.5	-	8.9	1.5
Pond pine	13.9	5.4	11.8	0.8	4.2	1.1	3.4	-	0.9	0.1	4.9	0.8
Cypress	7.7	9.2	8.6	15.6	6.8	1.8	-	-	-	-	7.3	5.8
Lowland hdwds.	2.8	23.0	1.5	15.8	0.5	7.6	1.4	1.0	0.1	<u>3/</u>	1.4	12.7
Upland hdwds.	-	10.5	0.5	6.3	0.6	4.6	0.8	0.6	<u>4/</u>	<u>4/</u>	0.7	2.2
Scrub oak	-	-	-	-	-	2.5	1.2	0.4	0.2	-	1.1	0.4
All types	12.9	13.1	7.8	8.1	3.8	2.9	1.4	0.5	0.7	0.1	5.1	4.8

CULL TREES (in standard cords)

Longleaf pine	0.2	2.3	0.1	0.3	0.1	0.2	0.1	1.7	0.1	0.3	0.1	0.6
Loblolly pine	0.2	3.7	0.1	2.9	0.4	1.7	<u>3/</u>	0.3	0.4	0.1	0.2	2.2
Shortleaf pine	-	1.4	<u>3/</u>	0.9	-	1.3	-	-	0.2	0.3	<u>3/</u>	1.0
Pond pine	0.1	6.7	0.1	0.6	0.4	1.3	0.2	-	0.2	0.4	0.2	1.0
Cypress	0.3	4.3	0.1	5.6	0.3	0.3	-	-	-	-	0.3	2.0
Lowland hdwds.	0.1	10.2	<u>3/</u>	6.3	<u>3/</u>	4.1	<u>3/</u>	3.4	0.1	0.1	<u>3/</u>	5.7
Upland hdwds.	-	2.2	-	3.5	-	1.8	-	0.4	<u>4/</u>	<u>4/</u>	<u>3/</u>	1.1
Scrub oak	-	-	-	-	-	4.1	0.1	0.3	-	0.8	0.1	0.5
All types	0.1	6.1	0.1	3.6	0.2	1.7	0.1	0.9	0.2	0.3	0.1	2.4

^{1/} Sound wood and bark.

^{2/} S - Softwoods, H - Hardwoods.

^{3/} Less than 0.05 cords per acre.

^{4/} Included with lowland hardwood type due to small acreage.

Table 14a. - Average volume^{1/} per acre of pole-timber trees in the Southern Coastal Plain by forest type and stand size, 1947

SOUND TREES (in standard cords)

Forest type	Large saw-timber stands		Small saw-timber stands		Pole timber stands		Seedling & sapling stands		Poorly stocked stands & unstocked areas		All stands	
	S ^{2/}	H ^{2/}	S	H	S	H	S	H	S	H	S	H
Longleaf pine	1.0	0.2	4.0	0.5	3.1	0.1	0.8	0.1	0.2	0.1	2.6	0.2
Loblolly pine	0.3	2.9	2.0	2.1	2.6	1.5	0.3	0.2	0.6	<u>3/</u>	1.5	1.7
Shortleaf pine	2.1	1.7	2.4	0.7	2.6	1.2	-	-	0.1	-	2.2	0.9
Pond pine	0.5	1.3	2.3	0.4	1.3	1.1	0.9	-	0.3	0.1	1.0	0.4
Cypress	0.1	0.9	1.6	3.0	6.1	1.4	-	-	-	-	4.2	1.6
Lowland hdwds.	0.1	4.1	0.2	5.9	<u>3/</u>	5.5	0.4	0.4	<u>3/</u>	<u>3/</u>	0.1	4.6
Upland hdwds.	-	0.9	0.4	1.9	<u>3/</u>	3.5	0.2	0.6	-	-	0.2	1.4
Scrub oak	-	-	-	-	-	1.7	0.6	0.3	0.2	-	0.6	0.3
All types	0.3	3.0	1.7	3.1	2.2	2.1	0.5	0.3	0.3	<u>3/</u>	1.2	1.9

CULL TREES (in standard cords)

Longleaf pine	-	0.2	0.1	0.1	<u>3/</u>	0.1	-	0.2	-	0.2	<u>3/</u>	0.1
Loblolly pine	<u>3/</u>	0.7	0.1	0.8	<u>3/</u>	0.8	<u>3/</u>	0.2	<u>3/</u>	<u>3/</u>	<u>3/</u>	0.6
Shortleaf pine	-	0.2	-	0.6	-	0.9	-	-	-	0.3	-	0.6
Pond pine	-	1.5	<u>3/</u>	0.1	<u>3/</u>	0.6	-	-	-	0.1	<u>3/</u>	0.3
Cypress	-	0.5	<u>3/</u>	1.3	0.3	0.3	-	-	-	-	0.2	0.5
Lowland hdwds.	<u>3/</u>	1.4	<u>3/</u>	1.5	-	1.4	-	1.2	-	<u>3/</u>	<u>3/</u>	1.3
Upland hdwds.	-	-	-	1.8	-	0.9	-	0.3	-	-	-	0.6
Scrub oak	-	-	-	-	-	3.0	-	0.3	-	0.7	-	0.4
All types	<u>3/</u>	1.0	<u>3/</u>	0.9	<u>3/</u>	0.7	<u>3/</u>	0.4	<u>3/</u>	0.1	<u>3/</u>	0.7

^{1/} Sound wood and bark.

^{2/} S - Softwoods, H - Hardwoods.

^{3/} Less than 0.05 cords per acre.

Table 15a. - Net annual growth^{1/} of saw timber^{2/} in the Southern
Coastal Plain by stand size and species group, 1946

(in thousand board feet)

Stand size	Softwoods	Gums, soft maple and yellow-poplar	Other hardwoods	All species
Large saw timber	52,900	29,600	15,200	97,700
Small saw timber	136,700	80,400	25,100	242,200
Pole timber	26,600	7,900	6,100	40,600
Other stand sizes	16,200	800	2,000	19,000
All stands	232,400	118,700	48,400	399,500

^{1/} Log scale, International 1/4-inch rule, on sound-tree growing stock.

^{2/} Includes hardwoods 11.0 to 12.9 inches d.b.h.

Table 16a. - Net annual growth^{1/} of timber in the Southern Coastal Plain by
stand size and species group, 1946

ON SAW-TIMBER TREES (in standard cords)

Stand size	Softwoods		Gums, soft maple and yellow-poplar	Other hardwoods	All species
	Yellow pine	Other			
Large saw timber	113,400	6,400	79,500	43,200	242,500
Small saw timber	379,700	11,200	224,700	77,400	693,000
Pole timber	140,300	10,300	32,700	38,500	221,800
Other stand sizes	83,300	400	3,000	8,700	95,400
All stands	716,700	28,300	339,900	167,800	1,252,700

ON POLE TIMBER TREES (in standard cords)

Large saw timber	- 100	- 400	- 3,200	- 2,600	- 1,100
Small saw timber	- 4,200	1,500	- 15,400	16,300	- 1,800
Pole timber	22,400	15,800	9,900	21,900	70,000
Other stand sizes	10,700	3/	3/	4,200	14,900
All stands	28,800	16,900	- 8,700	45,000	82,000
Saw-timber and pole timber trees ^{2/}	745,500	45,200	331,200	212,800	1,334,700

^{1/} Sound wood and bark.

^{2/} Excluding cull trees.

^{3/} Less than 50 cords.

Table 17a. - Average net growth^{1/} of saw timber per acre in the Southern Coastal Plain by forest type and stand size, 1947

(in board feet)

Forest type	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Other stand sizes	All stands
Longleaf pine	301	301	117	29	165
Loblolly pine	359	285	70	16	187
Shortleaf pine	292	254	56	5	186
Pond pine	317	243	76	21	99
Cypress	193	323	38	-	121
Lowland hardwoods	309	274	69	33	198
Upland hardwoods	106	81	35	24	33
All types	326	278	75	25	149

^{1/} Log scale, International 1/4-inch rule, on sound-tree growing stock.
Applies only to stands in which there was no cutting during 1947.

Table 18a. - Average net growth^{1/} of timber per acre in the Southern Coastal Plain by forest type and stand size, 1947

Forest type	(in cords)				
	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Other stand sizes	All stands
Longleaf pine	0.8	0.9	0.5	0.2	0.6
Loblolly pine	1.0	0.9	0.6	0.1	0.7
Shortleaf pine	0.9	0.8	0.7	<u>2/</u>	0.7
Pond pine	0.7	0.6	0.4	0.1	0.3
Cypress	0.4	0.6	0.5	-	0.5
Lowland hardwoods	0.8	0.8	0.4	0.1	0.6
Upland hardwoods	0.2	0.2	0.3	0.1	0.2
All types	0.9	0.8	0.5	0.1	0.5

^{1/} Sound wood and bark, on the entire sound-tree growing stock, excluding cull trees. Applies to stands in which there was no cutting during 1947.

^{2/} Less than 0.05 cords per acre.

Table 19a. - Commodity drain^{1/} from saw timber in the Southern Coastal Plain
by commodity and species group, 1946

SOUND TREES					
Commodity	Softwoods	Gums, soft maple and yellow-poplar	Other hardwoods	All species	
	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Percent</u>
Lumber	218,920	75,898	11,447	306,265	66.5
Veneer bolts	5,354	44,279	767	50,400	11.0
Cooperage bolts	-	-	1,258	1,258	0.3
Pulpwood bolts	72,958	5,531	-	78,489	17.0
Poles	8,351	-	-	8,351	1.8
Piling	1,253	-	-	1,253	0.3
Posts	164	6	4	174	<u>3/</u>
Mine timbers	291	-	-	291	0.1
Crossties (hewn)	2,860	1,882	336	5,078	1.1
Shingles	-	-	-	-	-
Fuelwood	2,793	209	2,121	5,123	1.1
Other products ^{2/}	27	3,707	144	3,878	0.8
All commodities	312,971	131,512	16,077	460,560	100.0

1/ Log scale, International 1/4-inch rule.

2/ Handles, shuttle blocks, hardwood dimension, and miscellaneous farm use.

3/ Less than 0.05 percent.

Table 20a. - Commodity drain^{1/} from timber in the Southern Coastal Plain by commodity and species group, 1946

SOUND TREES						
Commodity	Softwoods		Gums, soft maple and yellow-poplar	Other hardwoods	All species	
	Yellow pine	Other				
	<u>Standard cords</u>	<u>Standard cords</u>	<u>Standard cords</u>	<u>Standard cords</u>	<u>Standard cords</u>	<u>Percent</u>
Lumber	506,300	21,600	134,400	27,800	740,100	54.0
Veneer bolts	14,800	-	101,800	1,800	118,400	8.6
Cooperage bolts	-	-	-	3,600	3,600	0.3
Pulpwood bolts	280,600	-	30,700	-	311,300	22.7
Poles	22,900	-	-	-	22,900	1.7
Piling	3,400	-	-	-	3,400	0.2
Posts	1,600	6,700	3,300	2,800	14,400	1.1
Mine timbers	1,600	-	-	-	1,600	0.1
Crossties (hewn)	6,200	-	5,800	1,000	13,000	1.0
Shingles	-	-	-	-	-	-
Fuelwood	35,000	-	16,200	73,100	124,300	9.1
Other products ^{2/}	6,300	-	8,200	2,600	17,100	1.2
All commodities	878,700	28,300	350,400	112,700	1,370,100	100.0
CULL TREES						
All commodities	35,000	-	16,200	73,100	124,300	-

^{1/} Sound wood and bark.

^{2/} Handles, shuttle blocks, hardwood dimension, and miscellaneous farm use.

Table 21a. - Net change^{1/} in saw-timber growing stock^{2/} in the Southern Coastal Plain by species group, 1946

SOUND TREES

Item	Softwoods	Gums, soft maple and yellow-poplar	Other hardwoods	Total
	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>
Growing stock, Jan. 1, 1946	4,612,700	2,356,600	967,800	7,937,100
Net growth	232,400	118,700	48,400	399,500
Commodity drain	313,000	131,500	16,100	460,600
Net change	- 80,600	- 12,800	+ 32,300	- 61,100
Growing stock, Jan. 1, 1947	4,532,100	2,343,800	1,000,100	7,876,000
Percent change	- 1.7	- 0.5	+ 3.3	- 0.8

^{1/} Log scale, International 1/4-inch rule.

^{2/} Includes hardwoods 11.0 to 12.9 inches d.b.h.

Table 22a. - Net change in growing stock of all timber^{1/} in the Southern Coastal Plain by species group, 1946

ALL TIMBER (in standard cords)

Item	Softwoods	Gums, soft maple and yellow-poplar	Other hardwoods	Total
Growing stock, Jan. 1, 1946	15,630,200	9,766,900	4,564,700	29,961,800
Net growth:				
On trees 5.0" and larger, Jan. 1, 1946	738,500	293,400	179,000	1,210,900
Trees recruiting to 5.0" in 1946	52,200	37,800	33,800	123,800
Total	790,700	331,200	212,800	1,334,700
Commodity drain	907,000	350,400	112,700	1,370,100
Net change	- 116,300	- 19,200	+ 100,100	- 35,400
Growing stock, Jan. 1, 1947	15,513,900	9,747,700	4,664,800	29,926,400
Percent change	- 0.7	- 0.2	+ 2.2	- 0.1

^{1/} The entire sound-tree growing stock, excluding cull trees.

Table 1b. - Gross area^{1/} of the Northern Coastal Plain by broad use class, 1947

Class of use	Area	
	<u>Acres</u>	<u>Percent</u>
Forest:		
Commercial	4,854,500	62.7
Withdrawn	18,600	0.3
Non-productive	1,700	<u>2/</u>
Total forest	4,874,800	63.0
Non-forest:		
Idle	368,000	4.7
Agriculture	1,718,200	22.2
Marsh	236,500	3.1
Dune and beach	17,000	0.2
Urban and other ^{3/}	210,200	2.7
Total non-forest	2,549,900	32.9
Total land	7,424,700	95.9
Total water	314,200	4.1
All classes	7,738,900	100.0

^{1/} From U. S. Bureau of the Census, 1940.

^{2/} Less than 0.05 percent.

^{3/} Includes urban, suburban residential, and rural industrial areas, rights-of-way, cemeteries, schools, etc.

Table 2b. - Ownership of land in the Northern Coastal Plain, 1947

Class of ownership	All land		Commercial forest land	
	<u>Acres</u>	<u>Percent</u>	<u>Acres</u>	<u>Percent</u>
Public:				
National forest	245,400	3.3	245,200	5.0
Indian	-	-	-	-
Other federal	216,900	2.9	138,500	2.9
Total federal	462,300	6.2	383,700	7.9
State	334,100 ^{1/}	4.5	132,500 ^{2/}	2.7
County and municipal	10,100	0.2	4,600	0.1
Total public	806,500	10.9	520,800	10.7
Private	6,618,200	89.1	4,333,700	89.3
All classes	7,424,700	100.0	4,854,500	100.0

^{1/} Includes 120,800 acres under long-term lease from the Federal Government.

^{2/} Includes 105,000 acres under long-term lease from the Federal Government.

Table 3b. - Ownership of all private properties of 1,000 acres or more in the Northern Coastal Plain, 1946^{1/}

Class of ownership	Distribution of all land ^{2/}	
	<u>Acres</u>	<u>Percent</u>
Corporate:		
Pulp company	386,900	19.5
Lumber company	385,400	19.4
Other forest industry	58,600	2.9
Bank, loan, and insurance	30,300	1.5
Railroad	-	-
Other	111,100	5.6
Total corporate	972,300	48.9
Individual:		
Estate, club, preserve	167,300	8.4
Farmer	394,100	19.8
Lumberman	143,500	7.2
Other forest industry	4,500	0.2
Other individual	296,200	14.9
Total individual	1,005,600	50.5
Unknown	11,300	0.6
All classes	1,989,200	100.0

^{1/} Data taken from county tax rolls, as of January 1, 1946.

^{2/} Includes forest and non-forest land on properties 1,000 acres and larger in size.

Table 4b. - Commercial forest area of the Northern Coastal Plain
by forest type and stand size, 1947^{1/}

Forest type	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>
Longleaf pine	28,600	165,200	154,400	130,200	71,000	549,400
Loblolly pine	310,100	713,100	181,200	463,000	78,800	1,746,200
Shortleaf pine	4,400	41,600	49,500	27,100	14,600	137,200
Pond pine	13,700	141,000	44,200	63,000	10,300	272,200
Cypress	38,900	90,000	-	17,200	-	146,100
Lowland hdwds.	337,600	623,300	171,700	468,600	75,000	1,676,200
Upland hdwds.	1,700	8,400	17,200	86,200	5,500	119,000
Scrub oak	-	-	-	208,200	-	208,200
All types	735,000	1,782,600	618,200	1,463,500	255,200	4,854,500
Percent	15.1	36.7	12.7	30.2	5.3	100.0

^{1/} See description of forest types and stand-size classes in the appendix.

Table 5b. - Net volume^{1/} of saw timber in the Northern Coastal Plain by species
and stand size, 1947

SOUND TREES (in thousand board feet)

Species ^{2/}	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
Softwoods:						
Longleaf pine	188,700	701,200	128,400	109,200	43,300	1,170,800
Loblolly pine	2,465,800	2,851,800	177,300	223,900	14,100	5,732,900
Shortleaf pine	47,300	177,000	49,100	8,300	-	281,700
Other pines	167,300	569,600	36,300	32,200	-	805,400
Total	2,869,100	4,299,600	391,100	373,600	57,400	7,990,800
Cypress	383,500	455,400	15,400	13,900	-	868,200
Cedar	-	800	-	-	-	800
Total sftwds.	3,252,600	4,755,800	406,500	387,500	57,400	8,859,800
Hardwoods:						
Tupelo	713,600	1,438,400	80,700	42,900	3,600	2,279,200
Sweetgum	746,700	561,700	12,500	20,700	800	1,342,400
Soft maple	160,000	277,700	17,900	200	-	455,800
Yellow-poplar	105,800	277,500	9,600	14,900	-	407,800
Other soft hdwds.	38,600	43,000	-	-	17,100	98,700
Total	1,764,700	2,598,300	120,700	78,700	21,500	4,583,900
Red oaks	517,700	315,400	49,900	21,300	1,400	905,700
White oaks	90,600	105,900	800	19,300	1,500	218,100
Hickory	107,800	85,700	7,000	11,600	-	212,100
Ash	145,700	100,200	22,800	-	-	268,700
Sycamore, birch	141,000	99,400	1,800	2,900	-	245,100
Total	1,002,800	706,600	82,300	55,100	2,900	1,849,700
Total hdwds.	2,767,500	3,304,900	203,000	133,800	24,400	6,433,600
All sound trees	6,020,100	8,060,700	609,500	521,300	81,800	15,293,400
Percent	39.4	52.7	4.0	3.4	0.5	100.0

^{1/} Log scale, International 1/4-inch rule.

^{2/} See appendix for species combined with others.

Table 6b. - Net volume^{1/} of saw timber in the Northern Coastal Plain
by species and diameter class, 1947

SOUND TREES						
Species	10-12 inches ^{2/}	14-18 inches	20-24 inches	26 + inches	All diameters	
	<u>Thousand</u> <u>bd. ft.</u>	<u>Thousand</u> <u>bd. ft.</u>	<u>Thousand</u> <u>bd. ft.</u>	<u>Thousand</u> <u>bd. ft.</u>	<u>Thousand</u> <u>bd. ft.</u>	<u>Percent</u>
Softwoods:						
Longleaf pine	567,600	548,400	54,800	-	1,170,800	7.6
Loblolly pine	1,466,900	2,996,900	913,000	356,100	5,732,900	37.5
Shortleaf pine	154,800	117,200	9,700	-	281,700	1.8
Other pines	278,400	482,800	44,200	-	805,400	5.3
Total	2,467,700	4,145,300	1,021,700	356,100	7,990,800	52.2
Cypress	296,300	344,500	92,900	134,500	868,200	5.7
Cedar	800	-	-	-	800	3/
Total sftwds.	2,764,800	4,489,800	1,114,600	490,600	8,859,800	57.9
Hardwoods:						
Tupelo	513,700	1,310,700	328,100	126,700	2,279,200	14.9
Sweetgum	196,800	674,300	257,600	213,700	1,342,400	8.8
Soft maple	89,600	276,200	58,200	31,800	455,800	3.0
Yellow-poplar	46,900	281,600	66,700	12,600	407,800	2.7
Other soft hdwds.	16,000	50,400	32,300	-	98,700	0.6
Total	863,000	2,593,200	742,900	384,800	4,583,900	30.0
Red oaks	102,900	320,400	277,700	204,700	905,700	5.9
White oaks	42,000	90,600	37,000	48,500	218,100	1.4
Hickory	32,800	94,100	51,600	33,600	212,100	1.4
Ash	38,400	102,000	72,700	55,600	268,700	1.8
Sycamore, birch	32,800	151,600	43,700	17,000	245,100	1.6
Total	248,900	758,700	482,700	359,400	1,849,700	12.1
Total hdwds.	1,111,900	3,351,900	1,225,600	744,200	6,433,600	42.1
All sound trees	3,876,700	7,841,700	2,340,200	1,234,800	15,293,400	100.0
Percent	25.3	51.3	15.3	8.1	100.0	

^{1/} Log scale, International 1/4-inch rule.

^{2/} Ten-inch hardwoods not included.

^{3/} Less than 0.05 percent.

Table 7b. - Net volume^{1/} of saw timber in the Northern Coastal Plain
by forest type and stand size, 1947

SOUND TREES (in thousand board feet)

Forest type ^{2/}	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
Longleaf pine	163,400	737,100	139,700	10,400	43,600	1,094,200
Loblolly pine	2,795,400	2,919,800	161,200	185,400	8,000	6,069,800
Shortleaf pine	28,700	193,300	43,500	4,500	-	270,000
Pond pine	133,700	534,900	23,600	11,200	11,500	714,900
Cypress	458,900	637,000	-	2,600	-	1,098,500
Lowland hdwds.	2,427,200	3,012,300	231,400	242,100	17,100	5,930,100
Upland hdwds.	12,800	26,300	10,100	37,100	1,600	87,900
Scrub oak	-	-	-	28,000	-	28,000
All types	6,020,100	8,060,700	609,500	521,300	81,800	15,293,400
Percent	39.4	52.7	4.0	3.4	0.5	100.0

^{1/} Log scale, International 1/4-inch rule.

^{2/} See description of forest types and stand-size classes in the appendix.

Table 8b. - Net volume^{1/} of all trees in the Northern Coastal Plain
by species and stand size, 1947

SOUND TREES (in thousand cords)						
Species	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
Softwoods:						
Longleaf pine	501	2,418	971	449	118	4,457
Loblolly pine	6,159	8,793	1,124	937	54	17,067
Shortleaf pine	139	660	349	33	2	1,183
Other pines	420	1,789	365	143	38	2,755
Total	7,219	13,660	2,809	1,562	212	25,462
Cypress	1,025	1,891	78	85	-	3,079
Cedar	-	9	3	-	-	12
Total sftwds.	8,244	15,560	2,890	1,647	212	28,553
Hardwoods:						
Tupelo	2,320	6,389	851	178	15	9,753
Sweetgum	2,222	2,429	301	178	8	5,138
Soft maple	614	1,456	182	10	-	2,262
Yellow-poplar	296	951	95	60	-	1,402
Other soft hwdws.	133	213	25	10	40	421
Total	5,585	11,438	1,454	436	63	18,976
Red oaks	1,574	1,160	307	163	5	3,209
White oaks	314	551	132	174	11	1,182
Hickory	322	331	102	32	49	836
Ash	562	499	129	17	-	1,207
Sycamore, birch	535	439	147	11	25	1,157
Holly, dogwood	123	156	8	8	-	295
Total	3,430	3,136	825	405	90	7,886
Total hwdws.	9,015	14,574	2,279	841	153	26,862
All sound trees	17,259	30,134	5,169	2,488	365	55,415
Percent	31.1	54.4	9.3	4.5	0.7	100.0

CULL TREES (in thousand cords)						
Softwoods	136	370	243	104	179	1,032
Hardwoods	4,741	7,193	1,355	1,745	104	15,138
All cull trees	4,877	7,563	1,598	1,849	283	16,170

^{1/} Sound wood and bark.

Table 9b. - Net volume^{1/} of all trees in the Northern Coastal Plain by species
and diameter class, 1947

SOUND TREES (in thousand cords)

Species	Pole trees		Saw-timber trees				All diameters
	6 inches	8 inches	10 inches	12 inches	14-18 inches	20 + inches	
Softwoods:							
Longleaf pine	421	871	853	824	1,360	128	4,457
Loblolly pine	825	1,613	1,851	2,520	7,378	2,880	17,067
Shortleaf pine	127	283	209	249	292	23	1,183
Other pines	272	356	409	423	1,193	102	2,755
Total	1,645	3,123	3,322	4,016	10,223	3,133	25,462
Cypress	261	481	399	517	878	543	3,079
Cedar	5	5	-	2	-	-	12
Total softwoods	1,911	3,609	3,721	4,535	11,101	3,676	28,553
Hardwoods:							
Tupelo	751	1,298	1,760	1,437	3,358	1,149	9,753
Sweetgum	482	561	587	594	1,799	1,115	5,138
Soft maple	191	420	492	249	695	215	2,262
Yellow-poplar	112	85	120	142	751	192	1,402
Other soft hdwds.	68	33	70	45	127	78	421
Total	1,604	2,397	3,029	2,467	6,730	2,749	18,976
Red oaks	353	317	309	283	795	1,152	3,209
White oaks	223	226	181	115	225	212	1,182
Hickory	121	74	111	93	234	203	836
Ash	184	182	145	118	270	308	1,207
Sycamore, birch	237	152	159	89	374	146	1,157
Holly, dogwood	68	75	66	40	41	5	295
Total	1,186	1,026	971	738	1,939	2,026	7,886
Total hardwoods	2,790	3,423	4,000	3,205	8,669	4,775	26,862
All sound trees	4,701	7,032	7,721	7,740	19,770	8,451	55,415
Percent	8.5	12.7	13.9	14.0	35.7	15.2	100.0

CULL TREES (in thousand cords)

Softwoods	52	92	197	157	290	244	1,032
Hardwoods	1,059	1,473	1,401	2,195	4,636	4,374	15,138
All cull trees	1,111	1,565	1,598	2,352	4,926	4,618	16,170

^{1/} Sound wood and bark.

Table 10b. - Net volume^{1/} of all trees in the Northern Coastal Plain by species and class of material, 1947

Species	Saw-timber trees		Pole timber trees	Total sound-tree volume		Total cull- tree volume
	Sawlogs	Upper stems				
	<u>Thousand cords</u>	<u>Thousand cords</u>	<u>Thousand cords</u>	<u>Thousand cords</u>	<u>Percent</u>	<u>Thousand cords</u>
Softwoods:						
Longleaf pine	2,326	839	1,292	4,457	8.0	60
Loblolly pine	10,983	3,646	2,438	17,067	30.8	367
Shortleaf pine	570	203	410	1,183	2.1	88
Other pines	1,576	551	628	2,755	5.0	201
Total	15,455	5,239	4,768	25,462	45.9	716
Cypress	1,876	461	742	3,079	5.6	316
Cedar	2	-	10	12	2/	-
Total sftwds.	17,333	5,700	5,520	28,553	51.5	1,032
Hardwoods:						
Tupelo	4,287	1,657	3,809	9,753	17.6	5,953
Sweetgum	2,572	936	1,630	5,138	9.3	943
Soft maple	832	327	1,103	2,262	4.1	1,868
Yellow-poplar	795	290	317	1,402	2.5	216
Other soft hdwds.	180	70	171	421	0.8	199
Total	8,666	3,280	7,030	18,976	34.3	9,179
Red oaks	1,615	615	979	3,209	5.8	2,587
White oaks	398	154	630	1,182	2.1	1,061
Hickory	382	148	306	836	1.5	358
Ash	513	183	511	1,207	2.2	391
Sycamore, birch	435	174	548	1,157	2.1	586
Holly, dogwood	86	-	209	295	0.5	100
Scrub oaks	-	-	-	-	-	876
Total	3,429	1,274	3,183	7,886	14.2	5,959
Total hdwds.	12,095	4,554	10,213	26,862	48.5	15,138
Total all species	29,428	10,254	15,733	55,415	100.0	16,170
Percent	53.1	18.5	28.4	100.0		

^{1/} Sound wood and bark.

^{2/} Less than 0.05 percent.

Table 11b. - Net volume^{1/} of all trees in the Northern Coastal Plain
by forest type and stand size, 1947

SOUND TREES (in thousand cords)

Forest type	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
Longleaf pine	438	2,574	1,059	103	110	4,284
Loblolly pine	7,795	10,239	1,430	778	55	20,297
Shortleaf pine	102	704	344	43	1	1,194
Pond pine	387	1,728	271	58	65	2,509
Cypress	1,290	2,682	-	44	-	4,016
Lowland hardwoods	7,213	12,084	1,941	1,096	128	22,462
Upland hardwoods	34	123	124	215	6	502
Scrub oak	-	-	-	151	-	151
All types	17,259	30,134	5,169	2,488	365	55,415

CULL TREES (in thousand cords)

Longleaf pine	26	37	135	311	30	539
Loblolly pine	974	1,363	248	373	155	3,113
Shortleaf pine	8	71	112	2	19	212
Pond pine	55	242	54	42	31	424
Cypress	591	785	-	10	-	1,386
Lowland hardwoods	3,213	4,996	1,010	936	39	10,194
Upland hardwoods	10	69	39	64	9	191
Scrub oak	-	-	-	111	-	111
All types	4,877	7,563	1,598	1,849	283	16,170

^{1/} Sound wood and bark.

Table 12b. - Average volume^{1/} per acre of saw timber in the Northern Coastal Plain
by forest type and stand size, 1947

SOUND TREES (in board feet)

Forest type	Large saw-timber stands		Small saw-timber stands		Pole timber stands		Seedling & sapling stands		Poorly stocked stands & unstocked areas		All stands	
	S ^{2/}	H ^{2/}	S	H	S	H	S	H	S	H	S	H
Longleaf pine	5,655	63	4,452	10	897	8	80	-	551	63	1,975	17
Loblolly pine	7,938	1,076	3,599	496	774	117	367	33	92	9	3,061	415
Shortleaf pine	6,172	336	3,878	771	834	45	167	-	-	-	1,708	261
Pond pine	9,068	681	3,774	20	532	-	146	32	936	182	2,567	59
Cypress	5,474	6,329	3,866	3,210	-	-	152	-	-	-	3,857	3,662
Lowland hardwoods	783	6,407	660	4,173	318	1029	280	237	-	229	514	3,024
Upland hardwoods	408	7,210	110	3,012	484	102	386	45	256	50	375	364
Scrub oak	-	-	-	-	-	-	126	8	-	-	126	8
All types	4,426	3,765	2,668	1,854	657	328	265	91	225	96	1,825	1,325

^{1/} Log scale, International 1/4-inch rule.

^{2/} S - softwoods, H - hardwoods.

Table 13b. - Average volume^{1/} per acre of all trees in the Northern Coastal Plain by forest type and stand size, 1947

SOUND TREES (in standard cords)

Forest type	Large saw-timber stands		Small saw-timber stands		Pole timber stands		Seedling & sapling stands		Poorly stocked stands & unstocked areas		All stands	
	S ^{2/}	H ^{2/}	S	H	S	H	S	H	S	H	S	H
Longleaf pine	14.6	0.8	15.3	0.2	6.5	0.3	0.7	0.1	1.4	0.2	7.5	0.3
Loblolly pine	20.2	4.9	11.6	2.7	6.4	1.5	1.4	0.2	0.7	<u>3/</u>	9.4	2.2
Shortleaf pine	15.0	8.0	13.4	3.5	5.5	1.4	1.3	0.3	0.1	-	6.8	1.9
Pond pine	22.7	5.5	11.4	0.8	6.0	0.2	0.8	0.1	5.4	1.0	8.4	0.8
Cypress	13.0	20.2	13.7	16.1	-	-	2.6	-	-	-	12.2	15.3
Lowland hdwds.	2.0	19.4	2.2	17.2	0.9	10.4	1.1	1.3	-	1.7	1.6	11.8
Upland hdwds.	1.2	19.2	0.5	14.1	1.5	5.8	1.4	1.1	0.9	0.2	1.3	2.9
Scrub oak	-	-	-	-	-	-	0.7	<u>3/</u>	-	-	0.7	<u>3/</u>
All types	11.2	12.3	8.7	8.2	4.7	3.7	1.1	0.6	0.8	0.6	5.9	5.5

CULL TREES (in standard cords)

Longleaf pine	0.1	0.9	0.1	0.1	0.1	0.8	<u>3/</u>	2.4	-	0.4	0.1	0.9
Loblolly pine	0.2	2.9	0.1	0.8	0.5	0.9	<u>3/</u>	0.8	1.9	0.1	0.2	1.5
Shortleaf pine	-	1.7	-	1.7	1.4	0.8	<u>3/</u>	<u>3/</u>	0.7	0.5	0.6	0.9
Pond pine	0.4	3.7	0.6	1.1	0.3	0.9	0.6	<u>3/</u>	1.5	1.5	0.6	1.0
Cypress	0.9	14.3	1.6	7.1	-	-	0.6	-	-	-	1.3	8.2
Lowland hdwds.	0.1	9.5	<u>3/</u>	8.0	0.3	5.6	<u>3/</u>	2.0	-	0.5	0.1	6.0
Upland hdwds.	-	6.1	-	8.2	0.3	1.9	<u>3/</u>	0.7	0.9	0.8	0.1	1.5
Scrub oak	-	-	-	-	-	-	<u>3/</u>	0.5	-	-	<u>3/</u>	0.5
All types	0.2	6.5	0.2	4.0	0.4	2.2	0.1	1.2	0.7	0.4	0.2	3.1

^{1/} Sound wood and bark.

^{2/} S - Softwoods, H - Hardwoods.

^{3/} Less than 0.05 cords per acre.

Table 14b. - Average volume^{1/} per acre of pole-timber trees in the Northern Coastal Plain by forest type and stand size, 1947

SOUND TREES (in standard cords)												
Forest type	Large saw-timber stands		Small saw-timber stands		Pole timber stands		Seedling & sapling stands		Poorly stocked stands & unstocked areas		All stands	
	S ^{2/}	H ^{2/}	S	H	S	H	S	H	S	H	S	H
Longleaf pine	0.7	1.2	3.3	0.1	4.0	0.3	0.3	-	0.2	3/	2.2	0.2
Loblolly pine	0.7	2.2	1.9	1.6	4.2	1.2	0.5	0.2	0.4	3/	1.5	1.2
Shortleaf pine	0.4	6.2	2.7	1.5	3.2	1.3	0.7	0.4	0.1	-	2.1	1.2
Pond pine	3/	4.0	1.4	0.6	4.4	0.1	0.5	-	2.3	0.4	1.7	0.6
Cypress	0.4	4.0	4.7	5.9	-	-	2.2	-	-	-	3.2	4.7
Lowland hdwds.	0.1	3.2	0.3	6.4	0.2	7.7	0.3	0.6	-	1.1	0.2	4.0
Upland hdwds.	-	1.2	0.1	5.7	0.2	5.5	0.3	1.0	0.4	0.2	0.3	1.9
Scrub oak	-	-	-	-	-	-	0.4	-	-	-	0.4	-
All types	0.4	2.8	1.6	3.3	2.8	2.8	0.4	0.3	0.3	0.4	1.1	2.1

CULL TREES (in standard cords)												
Longleaf pine	3/	0.7	3/	3/	3/	0.4	3/	0.2	-	0.3	3/	0.3
Loblolly pine	3/	0.7	3/	0.8	0.1	0.4	3/	0.4	0.1	3/	3/	0.6
Shortleaf pine	-	1.4	-	0.8	0.3	0.3	3/	3/	0.5	0.4	0.2	0.4
Pond pine	-	0.9	0.1	0.4	0.2	0.2	0.1	-	-	0.6	0.1	0.3
Cypress	0.1	1.5	0.2	1.4	-	-	0.6	-	-	-	0.2	1.3
Lowland hdwds.	-	1.7	3/	1.8	-	2.3	3/	0.4	-	0.2	3/	1.4
Upland hdwds.	-	-	-	1.8	3/	1.1	-	0.4	-	0.2	3/	0.6
Scrub oak	-	-	-	-	-	-	3/	0.4	-	-	3/	0.4
All types	3/	1.2	3/	1.1	0.1	0.9	3/	0.3	0.1	0.2	3/	0.8

^{1/} Sound wood and bark.

^{2/} S - Softwoods, H - Hardwoods.

^{3/} Less than 0.05 cords per acre.

Table 15b. - Net annual growth^{1/} of saw timber^{2/} in the Northern Coastal Plain by stand size and species group, 1946

(in thousand board feet)

Stand size	Softwoods	Gums, soft maple and yellow-poplar	Other hardwoods	All species
Large saw timber	118,400	49,400	32,800	200,600
Small saw timber	277,600	121,900	34,800	434,300
Pole timber	26,700	5,300	3,600	35,600
Other stand sizes	31,100	4,400	2,500	38,000
All stands	453,800	181,000	73,700	708,500

1/ Log scale, International 1/4-inch rule, on sound-tree growing stock.

2/ Includes hardwoods 11.0 to 12.9 inches d.b.h.

Table 16b. - Net annual growth^{1/} of timber in the Northern Coastal Plain by
stand size and species group, 1946

ON SAW-TIMBER TREES (in standard cords)

Stand size	Softwoods		Gums, soft maple and yellow-poplar	Other hardwoods	All species
	Yellow pine	Other			
Large saw timber	263,200	15,800	133,600	90,000	502,600
Small saw timber	702,800	38,400	330,600	105,700	1,177,500
Pole timber	207,300	2,300	32,900	14,000	256,500
Other stand sizes	118,600	500	9,700	5,700	134,500
All stands	1,291,900	57,000	506,800	215,400	2,071,100

ON POLE TIMBER TREES (in standard cords)

Large saw timber	- 5,100	- 100	2,600	14,400	11,800
Small saw timber	3,500	10,700	- 2,600	22,000	33,600
Pole timber	43,100	200	22,000	30,300	95,600
Other stand sizes	6,300	800	6,800	33,400	47,300
All stands	47,800	11,600	28,800	100,100	188,300
Saw-timber and pole timber trees ^{2/}	1,339,700	68,600	535,600	315,500	2,259,400

^{1/} Sound wood and bark.

^{2/} Excluding cull trees.

Table 17b. - Average net growth^{1/} of saw timber per acre in the Northern
Coastal Plain by forest type and stand size, 1947

(in board feet)

Forest type	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Other stand sizes	All stands
Longleaf pine	178	286	111	14	131
Loblolly pine	393	278	74	27	199
Shortleaf pine	212	198	100	10	106
Pond pine	391	238	48	16	155
Cypress	371	334	-	5	305
Lowland hardwoods	229	256	45	21	153
Upland hardwoods	234	128	17	23	32
All types	307	268	74	20	161

^{1/} Log scale, International 1/4-inch rule, on sound-tree growing stock.
Applies only to stands in which there was no cutting during 1947.

Table 18b. - Average net growth^{1/} of timber per acre in the Northern
Coastal Plain by forest type and stand size, 1947

(in cords)					
Forest type	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Other stand sizes	All stands
Longleaf pine	0.5	0.9	0.8	0.1	0.5
Loblolly pine	1.1	0.9	0.6	0.1	0.6
Shortleaf pine	1.3	0.6	0.8	0.1	0.5
Pond pine	1.1	0.7	0.7	0.1	0.6
Cypress	0.9	0.9	-	0.1	0.8
Lowland hardwoods	0.6	0.7	0.6	0.1	0.5
Upland hardwoods	0.4	0.6	0.3	0.2	0.2
All types	0.8	0.8	0.7	0.1	0.5

^{1/} Sound wood and bark, on the entire sound-tree growing stock, excluding cull trees. Applies only to stands in which there was no cutting during 1947.

Table 19b. - Commodity drain^{1/} from saw timber in the Northern Coastal Plain
by commodity and species group, 1946

SOUND TREES					
Commodity	Softwoods	Gums, soft maple and yellow-poplar	Other hardwoods	All species	
	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Percent</u>
Lumber	309,137	76,573	22,752	408,462	63.7
Veneer bolts	13,072	72,641	2,090	87,803	13.7
Cooperage bolts	-	-	1,145	1,145	0.2
Pulpwood bolts	81,890	7,628	-	89,518	13.9
Poles	13,448	-	-	13,448	2.1
Piling	2,018	-	-	2,018	0.3
Posts	154	39	314	507	0.1
Mine timbers	304	-	-	304	<u>3/</u>
Crossties (hewn)	3,102	1,869	195	5,166	0.8
Shingles	70	-	-	70	<u>3/</u>
Fuelwood	23,104	1,912	3,702	28,718	4.5
Other products ^{2/}	575	3,596	257	4,428	0.7
All commodities	446,874	164,258	30,455	641,587	100.0

^{1/} Log scale, International 1/4-inch rule.

^{2/} Handles, shuttle blocks, hardwood dimension, and miscellaneous farm use.

^{3/} Less than 0.05 percent.

Table 20b. - Commodity drain^{1/} from timber in the Northern Coastal Plain by commodity and species group, 1946

SOUND TREES

Commodity	Softwoods		Gums, soft maple and yellow-poplar	Other hardwoods	All species	
	Yellow pine	Other				
	<u>Standard cords</u>	<u>Standard cords</u>	<u>Standard cords</u>	<u>Standard cords</u>	<u>Standard cords</u>	<u>Percent</u>
Lumber	612,900	132,600	186,000	55,300	986,800	45.2
Veneer bolts	35,900	-	167,100	4,800	207,800	9.5
Cooperage bolts	-	-	-	3,200	3,200	0.1
Pulpwood bolts	315,000	-	42,400	-	357,400	16.4
Poles	36,900	-	-	-	36,900	1.7
Piling	5,500	-	-	-	5,500	0.3
Posts	3,800	2,000	7,600	5,500	18,900	0.9
Mine timbers	1,700	-	-	-	1,700	0.1
Crossties (hewn)	6,700	-	5,700	700	13,100	0.6
Shingles	200	-	-	-	200	<u>3/</u>
Fuelwood	151,400	-	146,700	207,500	505,600	23.2
Other products ^{2/}	19,100	1,000	18,100	5,800	44,000	2.0
All commodities	1,189,100	135,600	573,600	282,800	2,181,100	100.0

CULL TREES

All commodities	75,100	-	72,600	102,700	250,400	-
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1/ Sound wood and bark.

2/ Handle bolts, shuttle blocks, hardwood dimension, and miscellaneous farm use.

3/ Less than 0.05 percent.

Table 21b. Net change^{1/} in saw-timber growing stock^{2/} in the Northern
Coastal Plain by species group, 1946

SOUND TREES

Item	Softwoods	Gums, soft maple and yellow-poplar	Other hardwoods	Total
	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>
Growing stock, Jan. 1, 1946	8,852,900	4,567,100	1,806,500	15,226,500
Net growth	453,800	181,000	73,700	708,500
Commodity drain	446,900	164,200	30,500	641,600
Net change	+ 6,900	+ 16,800	+ 43,200	+ 66,900
Growing stock, Jan. 1, 1947	8,859,800	4,583,900	1,849,700	15,293,400
Percent change	+ 0.1	+ 0.4	+ 2.4	+ 0.4

^{1/} Log scale, International 1/4-inch rule.

^{2/} Includes hardwoods 11.0 to 12.9 inches d.b.h.

Table 22b. - Net change in growing stock of all timber^{1/} in the Northern Coastal Plain by species group, 1946

ALL TIMBER (in standard cords)

Item	Softwoods	Gums, soft maple and yellow-poplar	Other hardwoods	Total
Growing stock, Jan. 1, 1946	28,469,700	19,013,700	7,852,800	55,336,200
Net growth:				
On trees 5.0" and larger, Jan. 1, 1946	1,325,200	464,900	275,100	2,065,200
Trees recruiting to 5.0" in 1946	83,100	70,700	40,400	194,200
Total	1,408,300	535,600	315,500	2,259,400
Commodity drain	1,324,700	573,600	282,800	2,181,100
Net change	+ 83,600	- 38,000	+ 32,700	+ 78,300
Growing stock, Jan. 1, 1947	28,553,300	18,975,700	7,885,500	55,414,500
Percent change	+ 0.3	- 0.2	+ 0.4	+ 0.1

^{1/} The entire sound-tree growing stock, excluding cull trees.

Table 1c. - Gross area^{1/} of the Piedmont by broad use class, 1947.

Class of use	Area	
	<u>Acres</u>	<u>Percent</u>
Forest:		
Commercial	4,018,700	59.0
Withdrawn	16,300	0.2
Non-productive	600	<u>2/</u>
Total forest	4,035,600	59.2
Non-forest		
Idle	635,400	9.3
Agriculture	1,896,600	27.8
Marsh	-	-
Dune and beach	-	-
Urban and other ^{3/}	176,100	2.6
Total non-forest	2,708,100	39.7
Total land	6,743,700	98.9
Total water	74,200	1.1
All classes	6,817,900	100.0

^{1/} From U. S. Bureau of the Census, 1940.

^{2/} Less than 0.05 percent.

^{3/} Includes urban, suburban residential, and rural industrial areas, rights-of-way, cemeteries, schools, etc.

Table 2c. - Ownership of land in the Piedmont, 1947

Class of ownership	All land		Commercial forest land	
	<u>Acres</u>	<u>Percent</u>	<u>Acres</u>	<u>Percent</u>
Public:				
National forest	336,300	5.0	270,800	6.7
Indian	4,300	0.1	2,600	0.1
Other federal	29,200	0.4	600	<u>1/</u>
Total federal	369,800	5.5	274,000	6.8
State	42,100 ^{2/}	0.6	18,800 ^{3/}	0.5
County and municipal	37,600	0.6	14,300	0.3
Total public	449,500	6.7	307,100	7.6
Private	6,294,200	93.3	3,711,600	92.4
All classes	6,743,700	100.0	4,018,700	100.0

1/ Less than 0.05 percent.

2/ Includes 27,300 acres under long-term lease from the Federal Government.

3/ Includes 17,800 acres under long-term lease from the Federal Government.

Table 3c. - Ownership of all private properties of 1,000 acres or more in the Piedmont, 1946^{1/}

Class of ownership	Distribution of all land ^{2/}	
	<u>Acres</u>	<u>Percent</u>
Corporate:		
Pulp company	67,400	8.8
Lumber company	125,200	16.4
Other forest industry	-	-
Bank, loan, and insurance	6,300	0.8
Railroad	-	-
Other	178,600	23.4
Total corporate	377,500	49.4
Individual:		
Estate, club, preserve	-	-
Farmer	240,100	31.4
Lumberman	82,500	10.8
Other forest industry	-	-
Other individual	63,900	8.4
Total individual	386,500	50.6
Unknown	-	-
All classes	764,000	100.0

^{1/} Data taken from county tax rolls, as of January 1, 1946.

^{2/} Includes forest and non-forest land on properties 1,000 acres and larger in size.

Table 4c. - Commercial forest area of the Piedmont
by forest type and stand size, 1947^{1/}

Forest type	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>
Longleaf pine	--	-	1,400	-	2,000	3,400
Loblolly pine	30,800	310,000	377,400	256,900	68,700	1,043,800
Shortleaf pine	80,000	487,200	910,000	267,500	200,400	1,945,100
Pond pine	-	-	-	-	-	-
Cypress	-	-	-	-	-	-
Lowland hdwds.	36,600	82,300	171,700	109,800	33,500	433,900
Upland hdwds.	60,300	154,200	300,800	73,600	-	588,900
Scrub oak	-	-	-	3,600	-	3,600
All types	207,700	1,033,700	1,761,300	711,400	304,600	4,018,700
Percent	5.2	25.7	43.8	17.7	7.6	100.0

^{1/} See description of forest types and stand-size classes in the appendix.

Table 5c. - Net volume^{1/} of saw timber in the Piedmont by species and stand size, 1947

SOUND TREES (in thousand board feet)

Species ^{2/}	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All Stands
Softwoods:						
Longleaf pine	-	-	-	2,300	500	2,800
Loblolly pine	205,200	1,210,000	290,300	85,600	6,900	1,798,000
Shortleaf pine	349,100	1,206,700	562,600	52,700	18,000	2,189,100
Other pines	11,200	84,200	19,500	300	-	115,200
Total	565,500	2,500,900	872,400	140,900	25,400	4,105,100
Hemlock	32,400	400	-	-	-	32,800
Cedar	1,400	12,800	12,500	3,200	-	29,900
Total sftwds.	599,300	2,514,100	884,900	144,100	25,400	4,167,800
Hardwoods:						
Tupelo	4,400	14,000	10,300	1,500	-	30,200
Sweetgum	81,300	159,800	94,800	31,800	3,200	370,900
Soft maple	3,700	14,200	8,400	-	-	26,300
Yellow poplar	168,000	150,700	140,400	16,000	3,800	478,900
Other soft hwdws.	11,800	41,000	9,100	-	-	61,900
Total	269,200	379,700	263,000	49,300	7,000	968,200
Red oaks	79,300	188,000	138,300	24,000	600	430,200
White oaks	130,500	174,800	60,100	1,400	-	366,800
Hickory	60,800	98,300	40,200	3,400	-	202,700
Ash	9,300	10,600	12,300	-	-	32,200
Sycamore, birch	31,800	106,700	35,200	9,400	2,500	185,600
Total	311,700	578,400	286,100	38,200	3,100	1,217,500
Total hwdws.	580,900	958,100	549,100	87,500	10,100	2,185,700
All sound trees	1,180,200	3,472,200	1,434,000	231,600	35,500	6,353,500
Percent	18.6	54.6	22.6	3.6	0.6	100.0

^{1/} Log scale, International 1/4-inch rule.

^{2/} See appendix for species combined with others.

Table 6c.-- Net volume^{1/} of saw timber in the Piedmont
by species and diameter class, 1947

SOUND TREES

Species	10-12 inches ^{2/}	14-18 inches	20-24 inches	26 + inches	All diameters	
	Thousand bd. ft.	Thousand bd. ft.	Thousand bd. ft.	Thousand bd. ft.	Thousand bd. ft.	Percent
Softwoods:						
Longleaf pine	2,000	800	-	-	2,800	3/
Loblolly pine	1,014,500	647,000	109,200	27,300	1,798,000	28.3
Shortleaf pine	1,423,100	645,700	120,300	-	2,189,100	34.5
Other pines	66,300	47,000	1,900	-	115,200	1.8
Total	2,505,900	1,340,500	231,400	27,300	4,105,100	64.6
Cypress	-	-	-	-	-	-
Hemlock	1,900	2,000	17,600	11,300	32,800	0.5
Cedar	22,800	7,100	-	-	29,900	0.5
Total sftwds.	2,530,600	1,349,600	249,000	38,600	4,167,800	65.6
Hardwoods:						
Tupelo	11,900	12,900	5,400	-	30,200	0.5
Sweetgum	97,800	230,800	42,300	-	370,900	5.8
Soft maple	15,200	11,100	-	-	26,300	0.4
Yellow-poplar	77,100	254,100	98,300	49,400	478,900	7.5
Other soft hdwds.	17,800	39,000	5,100	-	61,900	1.0
Total	219,800	547,900	151,100	49,400	968,200	15.2
Red oaks	106,900	240,000	64,600	18,700	430,200	6.8
White oaks	78,000	202,500	60,100	26,200	366,800	5.8
Hickory	36,000	119,500	40,300	6,900	202,700	3.2
Ash	18,000	6,900	7,300	-	32,200	0.5
Sycamore, birch	44,900	86,600	39,400	14,700	185,600	2.9
Total	283,800	655,500	211,700	66,500	1,217,500	19.2
Total hdwds.	503,600	1,203,400	362,800	115,900	2,185,700	34.4
All sound trees	3,034,200	2,553,000	611,800	154,500	6,353,500	100.0
Percent	47.8	40.2	9.6	2.4	100.0	

^{1/} Log scale, International 1/4-inch rule.

^{2/} Ten-inch hardwoods not included.

^{3/} Less than 0.05 percent.

Table 7c. - Net volume^{1/} of saw timber in the Piedmont by forest type and stand size, 1947

SOUND TREES (in thousand board feet)

Forest type ^{2/}	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
Longleaf pine	-	-	400	-	-	400
Loblolly pine	239,300	1,323,400	311,800	125,700	7,600	2,007,800
Shortleaf pine	534,100	1,520,900	750,000	43,900	18,600	2,867,500
Pond pine	-	-	-	-	-	-
Cypress	-	-	-	-	-	-
Lowland hdwds.	179,000	239,700	136,400	54,100	9,300	618,500
Upland hdwds.	227,800	388,200	235,400	6,400	-	857,800
Scrub oak	-	-	-	1,500	-	1,500
All types	1,180,200	3,472,200	1,434,000	231,600	35,500	6,353,500
Percent	18.6	54.6	22.6	3.6	0.6	100.0

^{1/} Log scale, International 1/4-inch rule.

^{2/} See description of forest types and stand-size classes in the appendix.

Table 8c. - Net volume^{1/} of all trees in the Piedmont by species
and stand size, 1947

SOUND TREES (in thousand cords)

Species	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
Softwoods:						
Longleaf pine	-	-	3	6	1	10
Loblolly pine	531	4,224	2,967	593	32	8,347
Shortleaf pine	947	5,451	5,289	441	86	12,214
Other pines	28	336	569	8	-	941
Total	1,506	10,011	8,828	1,048	119	21,512
Cypress	-	-	4	-	-	4
Hemlock	77	1	1	-	-	79
Cedar	9	143	136	23	5	316
Total sftwds.	1,592	10,155	8,969	1,071	124	21,911
Hardwoods:						
Tupelo	65	85	110	14	-	274
Sweetgum	329	899	1,306	116	22	2,672
Soft maple	44	140	101	-	-	285
Yellow-poplar	474	585	617	57	16	1,749
Other soft hdwds.	45	146	349	-	-	540
Total	957	1,855	2,483	187	38	5,520
Red oaks	245	775	972	116	6	2,114
White oaks	423	926	843	17	-	2,209
Hickory	212	439	495	21	2	1,169
Ash	44	112	170	-	-	326
Sycamore, birch	131	491	549	125	11	1,307
Holly, dogwood	30	62	87	1	-	180
Total	1,085	2,805	3,116	280	19	7,305
Total hdwds.	2,042	4,660	5,599	467	57	12,825
All sound trees	3,634	14,815	14,568	1,538	181	34,736
Percent	10.5	42.7	41.9	4.4	0.5	100.0

CULL TREES (in thousand cords)

Softwoods	61	398	826	294	42	1,621
Hardwoods	1,034	2,277	2,554	418	96	6,379
All cull trees	1,095	2,675	3,380	712	138	8,000

^{1/} Sound wood and bark.

Table 9c. - Net volume^{1/} of all trees in the Piedmont by species and diameter class, 1947

SOUND TREES (in thousand cords)

Species	Pole trees		Saw-timber trees				All diameters
	6 inches	8 inches	10 inches	12 inches	14-18 inches	20 + inches	
Softwoods:							
Longleaf pine	-	3	5	-	2	-	10
Loblolly pine	1,890	1,728	1,489	1,380	1,567	293	8,347
Shortleaf pine	3,304	3,047	2,412	1,627	1,562	262	12,214
Other pines	346	297	90	91	112	5	941
Total	5,540	5,075	3,996	3,098	3,243	560	21,512
Cypress	-	4	-	-	-	-	4
Hemlock	4	3	2	4	5	61	79
Cedar	174	50	46	26	20	-	316
Total softwoods	5,718	5,132	4,044	3,128	3,268	621	21,911
Hardwoods:							
Tupelo	111	42	42	33	33	13	274
Sweetgum	633	571	478	286	602	102	2,672
Soft maple	51	83	81	41	29	-	285
Yellow-poplar	109	179	222	225	664	350	1,749
Other soft hdwds.	211	68	103	47	98	13	540
Total	1,115	943	926	632	1,426	478	5,520
Red oaks	319	396	328	283	593	195	2,114
White oaks	355	443	490	212	505	204	2,209
Hickory	269	185	210	95	295	115	1,169
Ash	68	111	58	52	18	19	326
Sycamore, birch	285	329	225	122	221	125	1,307
Holly, dogwood	98	52	17	1	12	-	180
Total	1,394	1,516	1,328	765	1,644	658	7,305
Total hardwoods	2,509	2,459	2,254	1,397	3,070	1,136	12,825
All sound trees	8,227	7,591	6,298	4,525	6,338	1,757	34,736
Percent	23.7	21.9	18.1	13.0	18.2	5.1	100.0

CULL TREES (in thousand cords)

Softwoods	312	238	400	275	301	95	1,621
Hardwoods	916	958	707	902	1,808	1,088	6,379
All cull trees	1,228	1,196	1,107	1,177	2,109	1,183	8,000

^{1/} Sound wood and bark.

Table 10c. - Net volume^{1/} of all trees in the Piedmont by species and class
of material, 1947

Species	Saw-timber trees		Pole timber trees	Total sound-tree volume		Total cull- tree volume
	Sawlogs	Upper stems				
	<u>Thousand cords</u>	<u>Thousand cords</u>	<u>Thousand cords</u>	<u>Thousand cords</u>	<u>Percent</u>	<u>Thousand cords</u>
Softwoods:						
Longleaf pine	5	2	3	10	2/	-
Loblolly pine	3,433	1,296	3,618	8,347	24.1	508
Shortleaf pine	4,208	1,655	6,351	12,214	35.2	732
Other pines	216	82	643	941	2.7	277
Total	7,862	3,035	10,615	21,512	62.0	1,517
Cypress	-	-	4	4	2/	-
Hemlock	54	18	7	79	0.2	28
Cedar	73	19	224	316	0.9	76
Total sftwds.	7,989	3,072	10,850	21,911	63.1	1,621
Hardwoods:						
Tupelo	56	23	195	274	0.8	325
Sweetgum	716	274	1,682	2,672	7.7	618
Soft maple	50	20	215	285	0.8	339
Yellow-poplar	898	341	510	1,749	5.0	253
Other soft hdwds.	112	46	382	540	1.6	286
Total	1,832	704	2,984	5,520	15.9	1,821
Red oaks	757	314	1,043	2,114	6.1	1,275
White oaks	657	264	1,288	2,209	6.3	1,291
Hickory	360	145	664	1,169	3.4	446
Ash	64	25	237	326	0.9	239
Sycamore, birch	334	134	839	1,307	3.8	835
Holly, dogwood	13	-	167	180	0.5	117
Scrub oaks	-	-	-	-	-	355
Total	2,185	882	4,238	7,305	21.0	4,558
Total hdwds.	4,017	1,586	7,222	12,825	36.9	6,379
Total all species	12,006	4,658	18,072	34,736	100.0	8,000
Percent	34.6	13.4	52.0	100.0		

^{1/} Sound wood and bark.

^{2/} Less than 0.05 percent.

Table 11c. - Net volume^{1/} of all trees in the Piedmont by forest type and stand size, 1947

SOUND TREES (in thousand cords)

Forest type	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
Longleaf pine	-	-	15	-	-	15
Loblolly pine	729	5,177	3,650	809	51	10,416
Shortleaf pine	1,583	7,012	7,413	439	100	16,547
Lowland hardwoods	566	1,028	1,635	236	30	3,495
Upland hardwoods	756	1,598	1,855	50	-	4,259
Scrub oak	-	-	-	4	-	4
All types	3,634	14,815	14,568	1,538	181	34,736

CULL TREES (in thousand cords)

Longleaf pine	-	-	6	-	-	6
Loblolly pine	62	373	486	289	26	1,236
Shortleaf pine	280	1,172	1,354	132	87	3,025
Lowland hardwoods	213	477	634	221	25	1,570
Upland hardwoods	540	653	900	69	-	2,162
Scrub oak	-	-	-	1	-	1
All types	1,095	2,675	3,380	712	138	8,000

^{1/} Sound wood and bark.

Table 12c. - Average volume^{1/} per acre of saw timber in the Piedmont by forest type and stand size, 1947

SOUND TREES (in board feet)

Forest type	Large saw-timber stands		Small saw-timber stands		Pole timber stands		Seedling & sapling stands		Poorly stocked stands & unstocked areas		All stands	
	S ^{2/}	H ^{2/}	S	H	S	H	S	H	S	H	S	H
Longleaf pine	-	-	-	-	268	-	-	-	-	-	108	-
Loblolly pine	6,897	872	3,951	318	670	156	377	112	111	-	1,719	204
Shortleaf pine	4,409	2,272	2,540	581	592	232	131	33	84	9	1,121	353
Pond pine	-	-	-	-	-	-	-	-	-	-	-	-
Cypress	-	-	-	-	-	-	-	-	-	-	-	-
Lowland hardwoods	667	4,225	113	2,800	137	657	104	389	31	247	161	1,265
Upland hardwoods	165	3,609	276	2,242	231	552	10	77	-	-	208	1,248
Scrub oak	-	-	-	-	-	-	-	424	-	-	-	424
All types	2,885	2,797	2,432	927	502	312	203	123	83	33	1,037	544

^{1/} Log scale, International 1/4-inch rule.

^{2/} S - softwoods, H - hardwoods.

Table 13c. - Average volume^{1/} per acre of all trees in the Piedmont by forest type and stand size, 1947

SOUND TREES (in standard cords)

Forest type	Large saw-timber stands		Small saw-timber stands		Pole timber stands		Seedling & sapling stands		Poorly stocked stands & unstocked areas		All stands	
	S ^{2/}	H ^{2/}	S	H	S	H	S	H	S	H	S	H
Longleaf pine	-	-	-	-	6.2	4.9	-	-	-	-	2.5	2.0
Loblolly pine	18.1	5.6	14.7	2.0	8.1	1.5	2.5	0.6	0.5	0.2	8.5	1.5
Shortleaf pine	11.7	8.1	11.0	3.4	6.0	2.1	1.4	0.3	0.4	0.1	6.3	2.2
Pond pine	-	-	-	-	-	-	-	-	-	-	-	-
Cypress	-	-	-	-	-	-	-	-	-	-	-	-
Lowland hdwds.	1.5	14.0	0.4	12.0	0.3	9.2	0.4	1.7	0.1	0.8	0.5	7.6
Upland hdwds.	0.7	11.8	1.1	9.2	1.1	5.1	0.1	0.5	-	-	0.9	6.3
Scrub oak	-	-	-	-	-	-	-	1.1	-	-	-	1.1
All types	7.7	9.8	9.8	4.5	5.1	3.2	1.5	0.7	0.4	0.2	5.5	3.2

CULL TREES (in standard cords)

Longleaf pine	-	-	-	-	-	4.1	-	-	-	-	-	1.7
Loblolly pine	0.2	1.8	0.4	0.8	0.7	0.6	0.9	0.3	0.2	0.2	0.6	0.6
Shortleaf pine	0.6	2.9	0.5	1.9	0.6	0.9	0.3	0.2	0.1	0.3	0.5	1.1
Pond pine	-	-	-	-	-	-	-	-	-	-	-	-
Cypress	-	-	-	-	-	-	-	-	-	-	-	-
Lowland hdwds.	-	5.8	-	5.8	<u>3/</u>	3.7	-	2.0	<u>3/</u>	0.7	<u>3/</u>	3.6
Upland hdwds.	0.1	8.9	-	4.2	0.1	2.9	0.1	0.9	-	-	0.1	3.6
Scrub oak	-	-	-	-	-	-	-	0.3	-	-	-	0.3
All types	0.3	5.0	0.4	2.2	0.5	1.4	0.4	0.6	0.1	0.3	0.4	1.6

^{1/} Sound wood and bark.

^{2/} S - Softwoods, H - Hardwoods.

^{3/} Less than 0.05 cords per acre.

Table 14c. - Average volume^{1/} per acre of pole-timber trees in the Piedmont
by forest type and stand size, 1947

SOUND TREES (in standard cords)												
Forest type	Large saw-timber stands		Small saw-timber stands		Pole timber stands		Seedling & sapling stands		Poorly stocked stands & unstocked areas		All stands	
	S ^{2/}	H ^{2/}	S	H	S	H	S	H	S	H	S	H
Longleaf pine	-	-	-	-	5.4	4.9	-	-	-	-	2.2	2.0
Loblolly pine	1.7	3.2	4.2	1.1	6.3	1.1	1.5	0.3	0.2	0.2	4.0	0.9
Shortleaf pine	1.2	2.6	4.2	1.9	4.4	1.5	1.0	0.2	0.2	3/	3.3	1.3
Pond pine	-	-	-	-	-	-	-	-	-	-	-	-
Cypress	-	-	-	-	-	-	-	-	-	-	-	-
Lowland hdwds.	3/	3.3	0.1	4.7	3/	7.5	0.1	0.7	-	0.2	0.1	4.3
Upland hdwds.	0.3	2.9	0.3	3.5	0.4	3.7	0.1	0.3	-	-	0.4	3.1
Scrub oak	-	-	-	-	-	-	-	-	-	-	-	-
All types	0.8	2.9	3.3	2.1	3.7	2.4	1.0	0.3	0.2	0.1	2.7	1.8

CULL TREES (in standard cords)												
Longleaf pine	-	-	-	-	-	3.2	-	-	-	-	-	1.3
Loblolly pine	-	1.2	3/	0.3	0.3	0.3	0.3	0.2	0.1	3/	0.2	0.3
Shortleaf pine	0.1	0.9	0.2	0.7	0.2	0.5	0.1	0.2	3/	3/	0.2	0.5
Pond pine	-	-	-	-	-	-	-	-	-	-	-	-
Cypress	-	-	-	-	-	-	-	-	-	-	-	-
Lowland hdwds.	-	1.9	-	1.9	-	2.0	-	0.7	3/	0.6	3/	1.5
Upland hdwds.	-	1.4	-	1.4	3/	1.3	0.1	0.3	-	-	3/	1.2
Scrub oak	-	-	-	-	-	-	-	-	-	-	-	-
All types	3/	1.3	0.1	0.8	0.2	0.7	0.2	0.3	3/	0.1	0.1	0.6

^{1/} Sound wood and bark.

^{2/} S - Softwoods, H - Hardwoods.

^{3/} Less than 0.05 cords per acre.

Table 15c. - Net annual growth^{1/} of saw timber^{2/} in the Piedmont by
stand size and species group, 1946

(in thousand board feet)

Stand size	Softwoods	Gums, soft maple and yellow-poplar	Other hardwoods	All species
Large saw timber	21,600	11,000	9,600	42,200
Small saw timber	156,400	21,200	26,300	203,900
Pole timber	54,000	16,500	16,700	87,200
Other stand sizes	12,300	2,100	1,400	15,800
All stands	244,300	50,800	54,000	349,100

1/ Log scale, International 1/4-inch rule, on sound-tree growing stock.

2/ Includes hardwoods 11.0 to 12.9 inches d.b.h.

Table 16c. - Net annual growth^{1/} of timber in the Piedmont by stand size and species group, 1946

ON SAW-TIMBER TREES (in standard cords)

Stand size	Softwoods		Gums, soft maple and yellow-poplar	Other hardwoods	All species
	Yellow pine	Other			
Large saw timber	47,300	1,700	25,200	25,500	99,700
Small saw timber	472,000	1,800	67,700	77,800	619,300
Pole timber	417,600	2,600	70,600	78,300	569,100
Other stand sizes	66,500	200	5,400	7,900	80,000
All stands	1,003,400	6,300	168,900	189,500	1,368,100

ON POLE TIMBER TREES (in standard cords)

Large saw timber	2,400	400	9,900	2,400	15,100
Small saw timber	37,700	7,200	6,100	18,900	69,900
Pole timber	330,600	4,700	81,500	82,000	498,800
Other stand sizes	33,000	1,800	3,300	5,300	43,400
All stands	403,700	14,100	100,800	108,600	627,200
Saw-timber and pole timber trees ^{2/}	1,407,100	20,400	269,700	298,100	1,995,300

^{1/} Sound wood and bark.

^{2/} Excluding cull trees.

Table 17c. - Average net growth^{1/} of saw timber per acre in the Piedmont
by forest type and stand size, 1947

(in board feet)

Forest type	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Other stand sizes	All stands
Longleaf pine	-	-	34	-	14
Loblolly pine	389	333	74	33	148
Shortleaf pine	196	177	67	10	86
Pond pine	-	-	-	-	-
Cypress	-	-	-	-	-
Lowland hardwoods	221	196	55	16	83
Upland hardwoods	114	122	51	3	70
All types	205	217	65	18	99

^{1/} Log scale, International 1/4-inch rule, on sound-tree growing stock.

Applies only to stands in which there was no cutting during 1947.

Table 18c. - Average net growth^{1/} of timber per acre in the Piedmont by
forest type and stand size, 1947

(in cords)

Forest type	Large saw-timber stands	Small saw-timber stands	Pole timber stands	Other stand sizes	All stands
Longleaf pine	-	-	1.1	-	0.4
Loblolly pine	1.3	1.1	1.1	0.2	0.8
Shortleaf pine	0.6	0.8	0.7	0.1	0.6
Pond pine	-	-	-	-	-
Cypress	-	-	-	-	-
Lowland hardwoods	0.7	0.6	0.9	0.1	0.5
Upland hardwoods	0.3	0.4	0.3	0.1	0.3
All types	0.6	0.8	0.7	0.1	0.6

^{1/} Sound wood and bark, on the entire sound-tree growing stock, excluding cull trees. Applies only to stands in which there was no cutting during 1947.

Table 19c. - Commodity drain^{1/} from saw timber in the Piedmont by commodity and species group, 1946

SOUND TREES

Commodity	Softwoods	Gums, soft maple and yellow-poplar	Other hardwoods	All species	
	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Percent</u>
Lumber	220,874	47,788	31,062	299,724	71.7
Veneer bolts	155	10,894	236	11,285	2.7
Cooperage bolts	-	-	1,365	1,365	0.3
Pulpwood bolts	75,537	3,682	-	79,219	18.9
Poles	-	-	-	-	-
Piling	-	-	-	-	-
Posts	725	67	2,795	3,587	0.9
Mine timbers	-	-	-	-	-
Crossties (hewn)	144	79	2	225	0.1
Shingles	80	-	-	80	<u>3/</u>
Fuelwood	13,426	1,664	7,362	22,452	5.4
Other products ^{2/}	-	-	114	114	<u>3/</u>
All commodities	310,941	64,174	42,936	418,051	100.0

1/ Log scale, International 1/4-inch rule.

2/ Handles, shuttle blocks, hardwood dimension, and miscellaneous farm use.

3/ Less than 0.05 percent.

Table 20c. - Commodity drain^{1/} from timber in the Piedmont by commodity and species group, 1946

SOUND TREES						
Commodity	Softwoods		Gums, soft maple and yellow-poplar	Other hardwoods	All species	
	Yellow pine	Other				
	<u>Standard cords</u>	<u>Standard cords</u>	<u>Standard cords</u>	<u>Standard cords</u>	<u>Standard cords</u>	<u>Percent</u>
Lumber	526,000	9,400	116,100	75,400	726,900	49.1
Veneer bolts	100	300	25,100	500	26,000	1.8
Cooperage bolts	-	-	-	3,800	3,800	0.3
Pulpwood bolts	290,500	-	20,400	-	310,900	21.0
Poles	-	-	-	-	-	-
Piling	-	-	-	-	-	-
Posts	800	7,900	1,600	6,800	17,100	1.2
Mine timbers	-	-	-	-	-	-
Crossties (hewn)	300	-	300	-	600	3/
Shingles	200	-	-	-	200	3/
Fuelwood	183,000	500	49,500	154,000	387,000	26.2
Other products ^{2/}	4,600	100	500	1,500	6,700	0.4
All commodities	1,005,500	18,200	213,500	242,000	1,479,200	100.0
CULL TREES						
All commodities	89,400	400	24,200	75,300	189,300	-

^{1/} Sound wood and bark.

^{2/} Handles, shuttle blocks, hardwood dimension, and miscellaneous farm use.

^{3/} Less than 0.05 percent.

Table 21c. - Net change^{1/} in saw-timber growing stock^{2/} in the Piedmont by species group, 1946

SOUND TREES				
Item	Softwoods	Gums, soft maple, and yellow-poplar	Other hardwoods	Total
	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>
Growing stock, Jan. 1, 1946	4,234,400	981,600	1,206,400	6,422,400
Net growth	244,300	50,800	54,000	349,100
Commodity drain	310,900	64,200	42,900	418,000
Net change	- 66,600	- 13,400	+ 11,100	- 68,900
Growing stock, Jan. 1, 1947	4,167,800	968,200	1,217,500	6,353,500
Percent change	- 1.6	- 1.4	+ 0.9	- 1.1

^{1/} Log scale, International 1/4-inch rule.

^{2/} Includes hardwoods 11.0 to 12.9 inches d.b.h.

Table 22c. - Net change in growing stock of all timber^{1/} in the Piedmont by species group, 1946

ALL TIMBER (in standard cords)

Item	Softwoods	Gums, soft maple and yellow-poplar	Other hardwoods	Total
Growing stock, Jan. 1, 1946	21,506,700	5,463,400	7,249,500	34,219,600
Net growth:				
On trees 5.0" and larger, Jan. 1, 1946	1,224,800	215,500	240,000	1,680,300
Trees recruiting to 5.0" in 1946	202,700	54,200	58,100	315,000
Total	1,427,500	269,700	298,100	1,995,300
Commodity drain	1,023,700	213,500	242,000	1,479,200
Net change	+ 403,800	+ 56,200	+ 56,100	+ 516,100
Growing stock, Jan. 1, 1947	21,910,500	5,519,600	7,305,600	34,735,700
Percent change	+ 1.9	+ 1.0	+ 0.8	+ 1.5

^{1/} The entire sound-tree growing stock, excluding cull trees.

Table 23. - Land area by county and broad use class, 1947.

County	Total land area ^{1/}	Non-forest land	Forest land			
			All forest	Non-commercial ^{2/}	Commercial	
	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>	<u>Percent</u>
Abbeville	323,700	134,900	188,800	-	188,800	58.3
Aiken	703,900	253,700	450,200	900	449,300	63.8
Allendale	266,600	135,200	131,400	-	131,400	49.3
Anderson	494,300	320,600	173,700	-	173,700	35.1
Bamberg	252,800	126,800	126,000	100	125,900	49.8
Barnwell	352,800	205,000	147,800	200	147,600	41.8
Beaufort	426,500	237,100	189,400	1,500	187,900	44.1
Berkeley	685,200	92,200	593,000	-	593,000	86.5
Calhoun	243,100	119,600	123,500	-	123,500	50.8
Charleston	594,100	259,900	334,200	1,300	332,900	56.0
Cherokee	250,900	123,100	127,800	1,400	126,400	50.4
Chester	372,600	100,800	271,800	400	271,400	72.8
Chesterfield	506,800	196,800	310,000	6,900	303,100	59.8
Clarendon	384,300	155,800	228,500	-	228,500	59.5
Colleton	663,300	198,300	465,000	900	464,100	70.0
Darlington	347,500	139,000	208,500	3/	208,500	60.0
Dillon	260,200	116,100	144,100	-	144,100	55.4
Dorchester	363,400	95,200	268,200	700	267,500	73.6
Edgefield	308,700	107,700	201,000	-	201,000	65.1
Fairfield	449,500	98,200	351,300	-	351,300	78.2
Florence	512,600	218,700	293,900	-	293,900	57.3
Georgetown	520,200	104,600	415,600	5,900	409,700	78.8
Greenville	506,700	238,700	268,000	900	267,100	52.7
Greenwood	289,700	80,000	209,700	1,000	208,700	72.0
Hampton	359,100	119,600	239,500	100	239,400	66.7
Horry	733,600	176,000	557,600	800	556,800	75.9
Jasper	367,200	86,400	280,800	-	280,800	76.5
Kershaw	504,400	167,900	336,500	3/	336,500	66.7
Lancaster	321,700	122,300	199,400	3/	199,400	62.0
Laurens	455,000	190,000	265,000	-	265,000	58.2
Lee	261,200	150,600	110,600	2,800	107,800	41.3
Lexington	461,200	169,700	291,500	-	291,500	63.2
McCormick	234,200	41,900	192,300	-	192,300	82.1
Marion	309,800	85,100	224,700	3/	224,700	72.5
Marlboro	306,900	156,300	150,600	-	150,600	49.1
Newberry	405,400	145,500	259,900	300	259,600	64.0
Oconee	427,100	96,800	330,300	1,200	329,100	77.1
Orangeburg	699,700	380,800	318,900	1,500	317,400	45.4
Pickens	319,400	129,300	190,100	3,400	186,700	58.5
Richland	475,200	143,600	331,600	1,500	330,100	69.5
Saluda	286,300	132,100	154,200	-	154,200	53.9
Spartanburg	530,700	322,400	208,300	-	208,300	39.3
Sumter	425,600	220,000	205,600	1,100	204,500	48.0
Union	328,600	113,500	215,100	-	215,100	65.5
Williamsburg	597,100	167,300	429,800	-	429,800	72.0
York	439,200	210,300	228,900	8,300	220,600	50.2
State total	19,328,000	7,385,400	11,942,600	43,100	11,899,500	61.6

^{1/} Gross area from Bureau of the Census, 1940, less inland water area as estimated by the Forest Survey.

^{2/} Non-productive forest land plus forest land withdrawn from commercial timber use.

^{3/} Less than 50 acres.

Table 24. - Ownership of all commercial forest land by county, 1947

County	Private		Public					
			National forest	Other federal ^{1/}	State ^{2/}	County, city, town	Total public	
	Acres	Percent	Acres	Acres	Acres	Acres	Acres	Percent
Abbeville	172,100	91.2	16,600	-	-	100	16,700	8.8
Aiken	437,900	97.5	-	-	10,500	900	11,400	2.5
Allendale	131,400	100.0	-	-	-	-	-	0.0
Anderson	168,600	97.1	-	-	5,000	100	5,100	2.9
Bamberg	125,900	100.0	-	-	-	-	-	0.0
Barnwell	146,600	99.3	-	-	1,000	-	1,000	0.7
Beaufort	186,900	99.5	-	1,000	-	-	1,000	0.5
Berkeley	384,800	64.9	186,800	7,100	13,100	1,200	208,200	35.1
Calhoun	122,400	99.1	-	-	1,100	-	1,100	0.9
Charleston	268,900	80.8	58,400	3,600	100	1,900	64,000	19.2
Cherokee	126,300	99.9	-	-	-	100	100	0.1
Chester	262,100	96.6	8,900	-	-	400	9,300	3.4
Chesterfield	224,200	74.0	-	-	78,900	3/	78,900	26.0
Clarendon	222,800	97.5	-	-	5,700	-	5,700	2.5
Colleton	462,700	99.7	-	-	-	1,400	1,400	0.3
Darlington	207,700	99.6	-	-	700	100	800	0.4
Dillon	144,100	100.0	-	-	-	-	-	0.0
Dorchester	267,500	100.0	-	-	-	-	-	0.0
Edgefield	178,600	88.9	22,100	-	-	300	22,400	11.1
Fairfield	340,100	96.8	11,200	-	-	-	11,200	3.2
Florence	293,400	99.8	-	-	100	400	500	0.2
Georgetown	374,200	91.3	-	35,500	-	-	35,500	8.7
Greenville	260,500	97.5	-	200	-	6,400	6,600	2.5
Greenwood	199,200	95.4	8,300	400	-	800	9,500	4.6
Hampton	234,200	97.8	-	-	5,200	-	5,200	2.2
Horry	506,800	91.0	-	50,000	-	3/	50,000	9.0
Jasper	280,000	99.7	-	800	-	-	800	0.3
Kershaw	336,200	99.9	-	-	200	100	300	0.1
Lancaster	199,300	99.9	-	-	3/	100	100	0.1
Laurens	247,500	93.4	16,700	-	-	800	17,500	6.6
Lee	107,800	100.0	-	-	-	3/	3/	0.0
Lexington	289,700	99.4	-	-	1,500	300	1,800	0.6
McCormick	157,200	81.7	35,100	-	-	-	35,100	18.3
Marion	224,700	100.0	-	-	-	3/	3/	0.0
Marlboro	150,500	99.9	-	-	-	100	100	0.1
Newberry	216,000	83.2	43,300	-	-	300	43,600	16.8
Oconee	258,800	78.6	62,400	-	6,200	1,700	70,300	21.4
Orangeburg	315,600	99.4	-	100	1,700	3/	1,800	0.6
Pickens	176,900	94.8	-	-	7,500	2,300	9,800	5.2
Richland	282,900	85.7	-	42,100	4,500	600	47,200	14.3
Saluda	150,700	97.7	3,400	-	-	100	3,500	2.3
Spartanburg	207,700	99.7	-	-	100	500	600	0.3
Sumter	174,900	85.5	-	200	29,200	200	29,600	14.5
Union	172,200	80.1	42,800	-	-	100	42,900	19.9
Williamsburg	429,800	100.0	-	-	-	-	-	0.0
York	217,800	98.7	-	2,600	-	200	2,800	1.3
State total	11,046,100	92.8	516,000	143,600	172,300	21,500	853,400	7.2

^{1/} Includes Indian tribal allotments.^{2/} Includes 122,800 acres under long-term lease from the Federal Government.^{3/} Less than 50 acres.

Table 25. - Net volume^{1/} of all trees by county, preferred

SOUND TREES (in thousand cords)

Line No.	County	Yellow pines		Gums, soft maple, and yellow-poplar ^{2/}		Other species ^{3/}		All species
		5 - 12 inches	13 + inches	5 - 12 inches	13 + inches	5 - 12 inches	13 + inches	
1	Abbeville	615	59	249	186	465	126	1,700
2	Aiken	1,453	612	312	236	281	131	3,025
3	Allendale	337	127	153	118	167	97	999
4	Anderson	558	96	181	69	198	110	1,212
5	Bamberg	223	190	290	283	372	208	1,566
6	Barnwell	70	40	443	434	109	176	1,272
7	Beaufort	393	503	202	170	178	83	1,529
8	Berkeley	1,861	2,673	1,057	1,289	667	990	8,537
9	Calhoun	261	258	194	385	220	70	1,388
10	Charleston	930	2,001	534	462	775	232	4,934
11	Cherokee	653	105	75	14	158	61	1,066
12	Chester	819	183	330	137	311	75	1,855
13	Chesterfield	795	677	587	284	172	86	2,601
14	Clarendon	380	546	233	377	244	236	2,016
15	Colleton	973	1,332	1,091	723	868	610	5,597
16	Darlington	459	397	403	454	195	171	2,079
17	Dillon	324	488	379	413	108	179	1,891
18	Dorchester	873	1,019	574	775	385	601	4,227
19	Edgefield	1,136	146	190	69	241	61	1,843
20	Fairfield	1,633	376	356	82	455	164	3,066
21	Florence	1,028	752	558	628	259	267	3,492
22	Georgetown	916	1,449	1,070	1,196	609	680	5,920
23	Greenville	792	110	379	84	235	178	1,778
24	Greenwood	1,057	235	107	115	180	80	1,774
25	Hampton	334	517	306	159	278	110	1,704
26	Horry	1,311	1,509	1,008	866	417	678	5,789
27	Jasper	779	544	415	272	122	135	2,267
28	Kershaw	871	265	975	365	285	94	2,855
29	Lancaster	853	106	329	108	257	17	1,670
30	Laurens	1,246	303	177	191	300	152	2,369
31	Lee	309	319	366	334	86	32	1,446
32	Lexington	1,030	247	207	131	111	37	1,763
33	McCormick	1,181	292	147	116	125	65	1,926
34	Marion	508	331	536	536	194	248	2,353
35	Marlboro	166	221	424	357	349	108	1,625
36	Newberry	1,837	433	310	64	219	89	2,952
37	Oconee	991	312	172	293	650	358	2,776
38	Orangeburg	791	932	843	1,031	436	556	4,589
39	Pickens	787	101	53	16	476	239	1,672
40	Richland	1,086	401	410	561	394	495	3,347
41	Saluda	990	337	59	28	279	86	1,779
42	Spartanburg	918	152	150	76	185	85	1,566
43	Sumter	100	225	603	997	340	511	2,776
44	Union	581	252	252	210	267	213	1,775
45	Williamsburg	1,062	1,102	354	360	497	379	3,754
46	York	1,018	187	113	112	346	181	1,957
State total		37,288	23,462	18,156	16,166	14,465	10,540	120,077

^{1/} Sound wood and bark (limbs of sound sawlog-size hardwood trees are included in cull volumes).

CULL TREES (in thousand cords)

Yellow pines		Gums, soft maple, and yellow-poplar ^{2/}		Other species ^{3/}		All species	
5 - 12 inches	13 + inches	5 - 12 inches	13 + inches	5 - 12 inches	13 + inches		
47	-	66	49	151	95	408	1
54	29	175	266	186	201	911	2
-	-	26	35	64	42	167	3
31	-	41	17	50	128	267	4
8	-	93	164	96	30	391	5
-	5	212	188	52	84	541	6
24	33	61	77	250	149	594	7
20	4	341	562	362	539	1,828	8
3	-	74	284	48	45	454	9
51	27	223	230	140	211	882	10
42	13	27	32	97	38	249	11
141	20	72	103	114	88	538	12
27	49	193	96	142	75	582	13
12	-	102	165	63	168	510	14
25	11	238	260	185	331	1,050	15
32	11	138	189	114	101	585	16
36	-	191	275	53	120	675	17
21	24	136	246	120	211	758	18
114	35	43	22	108	127	449	19
57	28	22	40	120	87	354	20
10	34	271	340	75	537	1,267	21
23	11	340	672	214	159	1,419	22
139	4	139	112	217	363	974	23
19	10	23	77	69	77	275	24
4	6	92	235	115	184	636	25
43	36	465	727	295	474	2,040	26
19	18	196	177	123	152	685	27
76	100	261	256	176	98	967	28
64	19	50	44	133	40	350	29
115	32	57	57	98	74	433	30
16	5	150	120	11	23	325	31
24	12	69	24	123	23	275	32
29	26	50	13	114	75	307	33
5	5	286	431	108	123	958	34
2	8	169	183	62	77	501	35
147	15	46	16	105	113	442	36
65	2	79	78	388	418	1,030	37
-	-	206	567	208	261	1,242	38
72	-	41	12	238	191	554	39
35	5	150	282	263	253	988	40
5	6	52	2	103	55	223	41
56	-	126	13	113	69	377	42
1	-	158	598	215	221	1,193	43
55	61	155	35	103	85	494	44
26	6	176	439	304	499	1,450	45
12	32	29	9	59	135	276	46
1,807	742	6,310	8,819	6,547	7,649	31,874	

^{2/} Includes cottonwood, willow, other soft-textured hardwoods, and hemlock.^{3/} Includes cypress, cedar, white pine, and hard-textured hardwoods.

Table 26. - Net volume^{1/} of saw timber by county and species group, 1947.

(in thousand board feet)

County	Softwoods ^{2/}	Gums, soft maple and yellow-poplar ^{3/}	Other hardwoods	All species
Abbeville	85,000	96,800	68,700	250,500
Aiken	497,900	129,400	79,700	707,000
Allendale	134,900	61,400	40,300	236,600
Anderson	128,500	32,300	56,100	216,900
Bamberg	233,000	137,100	37,000	407,100
Barnwell	43,800	227,000	63,400	334,200
Beaufort	281,500	92,300	39,400	413,200
Berkeley	1,640,500	617,800	301,100	2,559,400
Calhoun	164,400	162,900	29,600	356,900
Charleston	1,143,200	218,800	87,700	1,449,700
Cherokee	125,500	12,500	36,900	174,900
Chester	204,500	67,000	37,200	308,700
Chesterfield	429,900	155,400	45,000	630,300
Clarendon	336,100	176,100	109,900	622,100
Colleton	853,100	370,800	219,200	1,443,100
Darlington	253,000	222,100	78,500	553,600
Dillon	297,700	200,900	59,000	557,600
Dorchester	706,000	358,200	165,700	1,229,900
Edgefield	213,300	42,400	41,500	297,200
Fairfield	394,500	51,900	88,800	535,200
Florence	542,300	298,900	110,900	952,100
Georgetown	1,010,300	581,400	110,800	1,702,500
Greenville	142,100	37,900	83,400	263,400
Greenwood	268,000	55,800	39,000	362,800
Hampton	296,800	94,900	57,300	449,000
Horry	999,200	436,000	250,500	1,685,700
Jasper	389,200	149,000	56,300	594,500
Kershaw	260,700	210,500	52,300	523,500
Lancaster	177,300	56,000	16,700	250,000
Laurens	302,900	92,400	67,400	462,700
Lee	184,100	157,000	14,000	355,100
Lexington	258,300	69,500	17,700	345,500
Marion	302,700	262,300	61,600	626,600
Marlboro	185,300	179,000	47,200	411,500
McCormick	348,800	55,900	37,500	442,200
Newberry	434,000	36,300	48,300	518,600
Oconee	348,700	114,800	181,400	644,900
Orangeburg	673,200	491,300	194,500	1,359,000
Pickens	109,900	10,800	128,200	248,900
Richland	428,600	250,200	188,100	866,900
Saluda	316,700	10,400	47,700	374,800
Spartanburg	200,500	34,500	45,900	280,900
Sumter	119,900	446,000	220,000	785,900
Union	198,700	106,600	100,800	406,100
Williamsburg	726,300	171,500	113,100	1,010,900
York	168,900	53,900	92,000	314,800
State total	17,559,700	7,895,900	4,067,300	29,522,900

^{1/} Log scale, International 1/4-inch rule.^{2/} Includes pine and cypress.^{3/} Includes cottonwood, willow, magnolia, and other soft-textured hardwoods.^{4/} Includes oaks, hickories, ash, elm, and other hard-textured hardwoods.

Table 27. - Net volume^{1/} of saw timber by county, broad species group, and diameter class group, 1947.

(in thousand board feet)						
County	Softwoods		Hardwoods		Percent	
	9 - 14 inches	15 + inches	11 - 16 inches	17 + inches	Soft- woods	Hard- woods
Abbeville	73,400	11,600	145,600	19,900	33.9	66.1
Aiken	294,500	203,400	169,800	39,300	70.4	29.6
Allendale	111,900	23,000	74,600	27,100	57.0	43.0
Anderson	116,600	11,900	57,100	31,300	59.2	40.8
Bamberg	132,100	100,900	129,700	44,400	57.2	42.8
Barnwell	19,500	24,300	192,600	97,800	13.1	86.9
Beaufort	115,600	165,900	108,100	23,600	68.1	31.9
Berkeley	740,000	900,500	513,800	405,100	64.1	35.9
Calhoun	76,300	88,100	106,400	86,100	46.1	53.9
Charleston	517,600	625,600	188,600	117,900	78.9	21.1
Cherokee	95,400	30,100	49,400	-	71.8	28.2
Chester	158,400	46,100	85,400	18,800	66.2	33.8
Chesterfield	264,600	165,300	150,200	50,200	68.2	31.8
Clarendon	170,300	165,800	144,700	141,300	54.0	46.0
Colleton	374,900	478,200	340,400	249,600	59.1	40.9
Darlington	134,600	118,400	181,200	119,400	45.7	54.3
Dillon	120,800	176,900	183,400	76,500	53.4	46.6
Dorchester	293,400	412,600	259,800	264,100	57.4	42.6
Edgefield	174,700	38,600	51,900	32,000	71.8	28.2
Fairfield	312,100	82,400	109,200	31,500	73.7	26.3
Florence	352,700	189,600	196,600	213,200	57.0	43.0
Georgetown	502,900	507,400	388,600	303,600	59.3	40.7
Greenville	108,600	33,500	71,300	50,000	53.9	46.1
Greenwood	218,900	49,100	48,400	46,400	73.9	26.1
Hampton	174,700	122,100	126,200	26,000	66.1	33.9
Horry	575,200	424,000	366,000	320,500	59.3	40.7
Jasper	221,800	167,400	113,700	91,600	65.5	34.5
Kershaw	230,900	29,800	239,200	23,600	49.8	50.2
Lancaster	159,900	17,400	60,900	11,800	70.9	29.1
Laurens	206,300	96,600	99,100	60,700	65.5	34.5
Lee	75,700	108,400	115,800	55,200	51.8	48.2
Lexington	204,200	54,100	60,000	27,200	74.8	25.2
Marion	204,600	98,100	181,900	142,000	48.3	51.7
Marlboro	99,300	86,000	144,300	81,900	45.0	55.0
McCormick	310,500	38,300	78,400	15,000	78.9	21.1
Newberry	328,100	105,900	54,500	30,100	83.7	16.3
Oconee	255,300	93,400	165,500	130,700	54.1	45.9
Orangeburg	256,200	417,000	352,500	333,300	49.5	50.5
Pickens	83,000	26,900	74,300	64,700	44.2	55.8
Richland	307,700	120,900	168,900	269,400	49.4	50.6
Saluda	220,200	96,500	48,500	9,600	84.5	15.5
Spartanburg	179,100	21,400	51,200	29,200	71.4	28.6
Sumter	19,500	100,400	247,000	419,000	15.3	84.7
Union	121,700	77,000	100,800	106,600	48.9	51.1
Williamsburg	360,700	365,600	179,200	105,400	71.8	28.2
York	109,100	59,800	86,500	59,400	53.7	46.3
State total	10,183,500	7,376,200	7,061,200	4,902,000	59.5	40.5

^{1/} Log scale, International 1/4-inch rule.

Table 28. - Total commodity drain by county and species group, 1946

County	Saw timber			All sound trees five inches d.b.h. and larger		
	Softwoods	Hardwoods	Total	Softwoods	Hardwoods	Total
	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Thousand bd. ft.</u>	<u>Cords</u>	<u>Cords</u>	<u>Cords</u>
Abbeville	9,835	6,182	16,017	37,000	23,800	60,800
Aiken	19,373	10,519	29,892	52,600	41,600	94,200
Allendale	12,773	11,819	24,592	43,100	32,400	75,500
Anderson	9,828	4,333	14,161	41,500	22,300	63,800
Bamberg	7,252	8,183	15,435	22,800	24,800	47,600
Barnwell	13,278	9,046	22,324	36,800	29,500	66,300
Beaufort	18,086	7,553	25,639	52,700	19,500	72,200
Berkeley	49,992	7,646	57,638	143,600	22,700	166,300
Calhoun	12,670	7,043	19,713	35,800	25,400	61,200
Charleston	69,407	14,577	83,984	183,900	50,000	233,900
Cherokee	6,406	2,771	9,177	22,900	17,200	40,100
Chester	9,317	2,828	12,145	35,800	13,900	49,700
Chesterfield	20,185	12,973	33,158	57,700	42,500	100,200
Clarendon	23,578	8,530	32,108	67,900	37,800	105,700
Colleton	48,213	20,567	68,780	131,300	55,300	186,600
Darlington	12,377	6,730	19,107	43,300	28,700	72,000
Dillon	6,571	5,899	12,470	19,100	27,100	46,200
Dorchester	52,628	14,189	66,817	157,900	39,400	197,300
Edgefield	19,539	6,979	26,518	57,200	28,400	85,600
Fairfield	37,578	5,433	43,011	130,700	26,400	157,100
Florence	35,354	18,970	54,324	115,600	142,200	257,800
Georgetown	41,996	14,208	56,204	123,500	49,400	172,900
Greenville	14,975	14,343	29,318	45,900	44,000	89,900
Greenwood	13,180	4,720	17,900	44,600	17,900	62,500
Hampton	29,471	8,528	37,999	85,600	30,400	116,000
Horry	27,332	6,626	33,958	93,400	80,500	173,900
Jasper	29,418	18,439	47,857	87,400	48,800	136,200
Kershaw	32,957	10,956	43,913	99,900	47,300	147,200
Lancaster	14,393	7,455	21,848	48,400	20,900	69,300
Laurens	13,098	4,082	17,180	56,100	32,300	88,400
Lee	10,012	6,448	16,460	30,100	29,700	59,800
Lexington	29,993	6,488	36,481	88,500	31,000	119,500
Marion	16,032	23,605	39,637	52,000	79,500	131,500
Marlboro	9,001	11,648	20,649	22,600	36,400	59,000
McCormick	20,822	2,456	23,278	69,500	9,000	78,500
Newberry	36,205	8,906	45,111	113,300	37,400	150,700
Oconee	23,952	8,682	32,634	66,300	37,400	103,700
Orangeburg	39,816	25,215	65,031	112,500	85,000	197,500
Pickens	13,262	9,469	22,731	36,900	31,800	68,700
Richland	24,304	10,823	35,127	78,600	34,300	112,900
Saluda	20,632	5,947	26,579	55,600	21,500	77,100
Spartanburg	21,838	4,789	26,627	46,800	17,600	64,400
Sumter	21,545	11,736	33,281	60,000	44,900	104,900
Union	18,258	3,781	22,039	76,300	23,400	99,700
Williamsburg	46,231	23,338	69,569	133,500	103,400	236,900
York	7,823	3,954	11,777	38,900	30,300	69,200
State total	1,070,786	449,412	1,520,198	3,255,400	1,775,000	5,030,400

STANDARD FOREST SURVEY TABLES

As each state throughout the Nation is reported upon by the Forest Survey following initial or resurveys, it is planned to prepare a standard set of tables for each state presenting information on forest area, ownership, timber volume, growth, and drain. With such tables available, forest statistics for any group of states can be compiled. At the present time, the exact format of the tables for nation-wide use has not been definitely established, but tables 29 through 40, which follow, closely approximate the form which will be used.

Table 29. - Area of forest and non-forest land in South Carolina, 1947

Kind of land	Land area
	<u>M. acres</u>
Forest land:	
Commercial	11,900
Non-commercial	43
All forest land	11,943
Non-forest land	7,385
All land	19,328

Table 30. - Area of commercial forest land in South Carolina by stand size and ownership, 1947

Ownership	Saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands ^{1/}
	<u>M acres</u>	<u>M acres</u>	<u>M acres</u>	<u>M acres</u>	<u>M acres</u>
Federally owned or managed:					
National Forest	250	181	69	16	516
Indian ^{2/}	1	2	<u>3/</u>	<u>3/</u>	3
Other	54	19	60	8	141
Total Federal	305	202	129	24	660
State	49	32	84	7	172
County and Municipal	14	5	3	<u>3/</u>	22
Private	4,674	2,829	2,685	858	11,046
All ownerships	5,042	3,068	2,901	889	11,900

^{1/} For corresponding saw-timber volume see table 32.

^{2/} Includes tribal and trust allotments but not patented lands owned by Indians.

^{3/} Less than 500 acres.

Table 31. - Area of saw-timber stands on commercial forest land in South Carolina by broad forest type and character of growth, 1947

Character of growth	Softwood	Hardwood	All types
	<u>M acres</u>	<u>M acres</u>	<u>M acres</u>
Virgin	-	-	-
Second growth	3,228	1,813	5,041
Total	3,228	1,813	5,041

Table 32. - Board-foot volume^{1/} of saw-timber trees on commercial forest land in South Carolina by stand size and species, 1947

IN SOUND TREES					
Species	Saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
	<u>M bd. ft.</u>	<u>M bd. ft.</u>	<u>M bd. ft.</u>	<u>M bd. ft.</u>	<u>M bd. ft.</u>
Softwoods:					
Longleaf pine	1,754,400	246,300	191,900	67,100	2,259,700
Loblolly pine	8,863,600	613,100	396,600	43,500	9,916,800
Shortleaf pine	1,874,700	619,400	68,700	18,000	2,580,800
Other pines	1,238,000	122,400	81,600	4,000	1,446,000
Cypress	1,212,900	65,400	13,900	-	1,292,200
Hemlock	32,800	-	-	-	32,800
Cedar	15,000	12,500	3,900	-	31,400
Total	14,991,400	1,679,100	756,600	132,600	17,559,700
Hardwoods:					
Tupelo	3,212,100	131,400	48,000	6,100	3,397,600
Sweetgum	2,205,500	151,600	62,600	5,200	2,424,900
Soft maple	647,300	39,500	1,900	-	688,700
Yellow-poplar	1,012,800	160,200	30,900	3,800	1,207,700
Other soft hdwds.	149,500	10,400	-	17,100	177,000
Red oaks	1,628,800	235,000	62,800	3,900	1,930,500
White oaks	592,400	76,400	24,000	2,800	695,600
Hickory	446,200	56,300	22,200	-	524,700
Ash	375,200	41,900	-	-	417,100
Sycamore, birch	435,000	48,900	13,000	2,500	499,400
Total	10,704,800	951,600	265,400	41,400	11,963,200
All sound trees	25,696,200	2,630,700	1,022,000	174,000	29,522,900

IN DEAD TREES ^{2/}					
Dead chestnut	-	-	-	-	-
ALL MATERIAL	25,696,200	2,630,700	1,022,000	174,000	29,522,900

^{1/} Log scale, International 1/4-inch rule.

^{2/} Standing or down suitable for salvage.

Table 33. - Board-foot volume^{1/} of saw-timber trees on commercial forest land in South Carolina by species group and ownership, 1947

Ownership	Softwoods	Hardwoods	All species ^{2/}
	<u>M bd. ft.</u>	<u>M bd. ft.</u>	<u>M bd. ft.</u>
Federally owned or managed:			
National Forest	1,109,700	268,500	1,378,200
Indian	3,200	1,600	4,800
Other	277,300	35,200	312,500
Total Federal	1,390,200	305,300	1,695,500
State	195,300	96,800	292,100
County and Municipal	28,600	24,300	52,900
Private	15,945,600	11,536,800	27,482,400
All ownerships	17,559,700	11,963,200	29,522,900

^{1/} Log scale, International 1/4-inch rule.

^{2/} For corresponding areas, see table 30.

Table 34. - Cubic-foot volume^{1/} of saw timber and pole timber on commercial forest land in South Carolina by stand size and species, 1947

IN SOUND TREES					
Species	Saw-timber stands	Pole timber stands	Seedling & sapling stands	Poorly stocked stands & unstocked areas	All stands
	<u>M cu. ft.</u>	<u>M cu. ft.</u>	<u>M cu. ft.</u>	<u>M cu. ft.</u>	<u>M cu. ft.</u>
Softwoods:					
Longleaf pine	441,232	123,170	68,298	14,227	646,927
Loblolly pine	1,942,716	332,298	129,434	12,791	2,417,239
Shortleaf pine	541,457	376,441	33,120	6,329	957,347
Other pines	284,706	79,875	21,240	7,454	393,275
Cypress	304,688	48,642	6,449	-	359,779
Hemlock	6,478	37	-	-	6,515
Cedar	11,696	10,664	2,155	314	24,829
Total	3,532,973	971,127	260,696	41,115	4,805,911
Hardwoods:					
Tupelo	1,009,396	99,030	16,689	1,610	1,126,725
Sweetgum	596,929	122,070	23,295	2,828	745,122
Soft maple	237,198	35,995	1,048	-	274,241
Yellow-poplar	238,581	54,439	8,456	1,141	302,617
Other soft hdwds.	46,007	26,845	601	3,533	76,986
Red oaks	437,093	119,671	24,686	1,235	582,685
White oaks	197,774	77,848	21,190	1,039	297,851
Hickory	125,884	49,650	8,935	3,231	187,700
Ash	118,722	28,286	1,055	-	148,063
Other hard hdwds.	173,874	64,258	10,588	2,546	251,266
Total	3,181,458	678,092	116,543	17,163	3,993,256
All sound trees	6,714,431	1,649,219	377,239	58,278	8,799,167

IN CULL TREES					
Softwoods	82,987	89,165	33,078	21,615	226,845
Hardwoods	1,423,025	352,252	203,291	21,139	1,999,707
All cull trees	1,506,012	441,417	236,369	42,754	2,226,552

IN DEAD TREES ^{2/}					
Dead chestnut	-	-	-	-	-
ALL MATERIAL	8,220,443	2,090,636	613,608	101,032	11,025,719

^{1/} Excluding bark.

^{2/} Standing or down suitable for salvage.

Table 35. - Cubic-foot volume^{1/} of saw-timber and pole timber trees on commercial forest land in South Carolina by species group, tree size and kind of material, 1947

IN LIVING TREES			
Tree size and kind of material	Softwoods	Hardwoods	All species
	<u>M cu. ft.</u>	<u>M cu. ft.</u>	<u>M cu. ft.</u>
Saw-timber trees:			
Sawlog material	2,851,777	2,012,704	4,864,481
Upper stems	663,080	451,388	1,114,468
Pole timber trees	1,291,054	1,529,164	2,820,218
Cull trees ^{2/}	226,845	1,999,707	2,226,552
All living	5,032,756	5,992,963	11,025,719
IN DEAD TREES ^{3/}			
All classes	-	-	-
ALL MATERIAL	5,032,756	5,992,963	11,025,719

^{1/} Excluding bark.

^{2/} Includes limbs of sound saw-timber trees.

^{3/} Standing or down suitable for salvage.

Table 36. - Cubic-foot^{1/} volume of commodity drain from growing stock on commercial forest land in South Carolina by commodity, tree size, and species group, 1946

Commodity	Saw-timber trees			Pole timber trees			Total		
	Softwoods	Hardwoods	All species	Softwoods	Hardwoods	All species	Softwoods	Hardwoods	All species
Lumber	144,605	52,863	197,468	1,267	5	1,272	145,872	52,868	198,740
Veneer bolts	4,405	25,959	30,364	-	-	-	4,405	25,959	30,364
Cooperage bolts	-	828	828	-	-	-	-	828	828
Pulpwood bolts	49,337	4,232	53,569	19,956	3,299	23,255	69,293	7,531	76,824
Poles	4,435	-	4,435	59	-	59	4,494	-	4,494
Piling	672	-	672	-	-	-	672	-	672
Posts	110	136	246	1,488	1,825	3,313	1,598	1,961	3,559
Mine timbers	189	-	189	82	-	82	271	-	271
Crossties (hewn)	1,050	1,069	2,119	-	-	-	1,050	1,069	2,119
Shingles	26	-	26	-	-	-	26	-	26
Fuelwood	3,534	6,070	9,604	24,187	41,533	65,720	27,721	47,603	75,324
Other products ^{2/}	149	1,540	1,689	2,018	1,262	3,280	2,167	2,802	4,969
All commodities	208,512	92,697	301,209	49,057	47,924	96,981	257,569	140,621	398,190

CULL TREES (in thousand cubic feet)				
All commodities	3,169	2,085	5,254	11,501
			24,641	36,142
				14,670
				26,726
				41,596

^{1/} Excluding bark.

Table 37. - Board foot volume^{1/} of commodity drain from saw-
timber growing stock on commercial forest land in
South Carolina by commodity and species group, 1946

SOUND TREES

Commodity	Softwoods	Hardwoods	Total
	<u>M bd. ft.</u>	<u>M bd. ft.</u>	<u>M bd. ft.</u>
Lumber	748,931	265,520	1,014,451
Veneer bolts	18,581	130,907	149,488
Cooperage bolts	-	3,768	3,768
Pulpwood bolts	230,385	16,841	247,226
Poles	21,799	-	21,799
Piling	3,271	-	3,271
Posts	1,043	3,225	4,268
Mine timbers	595	-	595
Crossties (hewn)	6,106	4,363	10,469
Shingles	150	-	150
Fuelwood	39,323	16,970	56,293
Other products ^{2/}	602	7,818	8,420
All commodities	1,070,786	449,412	1,520,198

^{1/} Log scale, International 1/4-inch rule.

^{2/} Handles, shuttle blocks, hardwood dimension, and miscellaneous farm use.

Table 38. - Volume of growing stock killed^{1/} by fire and natural causes^{2/} on commercial forest land in South Carolina by species group and tree size, 1946

CUBIC-FOOT VOLUME			
Tree size	Softwoods	Hardwoods	All species
	<u>M cu. ft.</u>	<u>M cu. ft.</u>	<u>M cu. ft.</u>
Saw-timber trees	18,152	4,224	22,376
Pole timber trees	8,118	3,803	11,921
Total	26,270	8,027	34,297
BOARD-FOOT VOLUME			
	<u>M bd. ft.</u>	<u>M bd. ft.</u>	<u>M bd. ft.</u>
Saw-timber trees	94,700	22,700	117,400

^{1/} Unsalvaged.

^{2/} Insects, disease, windthrow, etc.

Table 39. - Current annual net growth^{1/} on commercial forest land in South Carolina by species group and tree size, 1946

CUBIC-FOOT VOLUME			
Tree size	Softwoods	Hardwoods	All species
	<u>M cu. ft.</u>	<u>M cu. ft.</u>	<u>M cu. ft.</u>
Saw-timber trees	235,088	125,959	361,047
Pole timber trees	33,092	24,349	57,441
Total	268,180	150,308	418,488
BOARD-FOOT VOLUME			
	<u>M bd. ft.</u>	<u>M bd. ft.</u>	<u>M bd. ft.</u>
Saw-timber trees	930,500	526,600	1,457,100

^{1/} Includes only the growth on the sound-tree or "desirable" growing stock.

Table 40. - Change in growing stock volume during 1946 in South Carolina by
species group

CUBIC-FOOT VOLUME

Item	Softwoods	Hardwoods	All species
	<u>M cu. ft.</u>	<u>M cu. ft.</u>	<u>M cu. ft.</u>
Growing stock, Jan. 1, 1946	4,795,300	3,983,569	8,778,869
Net growth	268,180	150,308	418,488
Commodity drain	257,569	140,621	398,190
Net change	+ 10,611	+ 9,687	+ 20,298
Growing stock, Jan. 1, 1947	4,805,911	3,993,256	8,799,167

BOARD-FOOT VOLUME

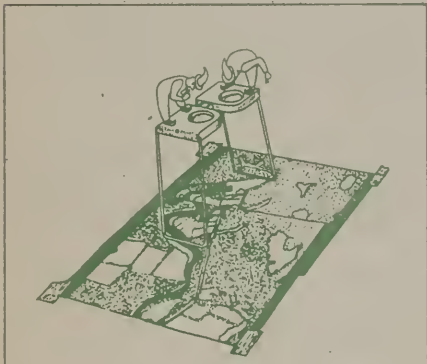
	<u>M bd. ft.</u>	<u>M bd. ft.</u>	<u>M bd. ft.</u>
Growing stock, Jan. 1, 1946	17,700,000	11,886,000	29,586,000
Net growth	930,500	526,600	1,457,100
Commodity drain	1,070,800	449,400	1,520,200
Net change	- 140,300	+ 77,200	- 63,100
Growing stock, Jan. 1, 1947	17,559,700	11,963,200	29,522,900

HOW THE FOREST INVENTORY IS MADE

The present system of inventory is based upon interpretation of aerial photographs supplemented by cruising of randomly selected ground plots. The county is the basic work unit. Steps in the procedure are as follows:



1. Acreages of forest land are estimated with the use of a dot grid placed on every third contact print along flight lines in each county. The proportion of dots falling on forest areas when applied to the gross area of the county yields a preliminary estimate of the acreage of forest land. This is later revised after certain field checks.



2. Every 5th plot listed as forest in step one is classified into forest type, stand class, and density class by careful stereoscopic analysis of the photographs. The proportion of plots falling in each classification when applied to the forest area of the county gives the area in each classification. These areas are revised following ground checking.



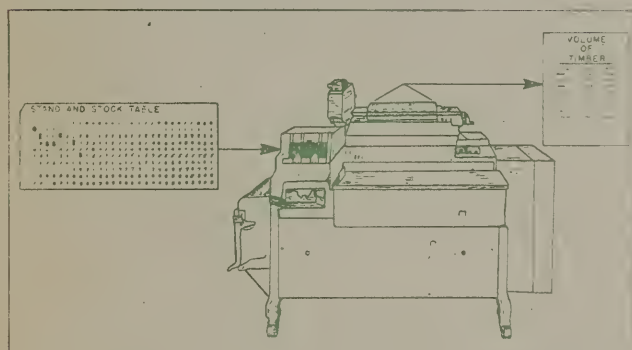
3. Timber cruisers make a detailed on-the-ground tally of a proportion of the photo plots in each stand class to obtain volume, growth, cull, and mortality data, and to check accuracy of photo classification. Proportions vary according to distribution of stand classes; in the Coastal Plain every 3rd large saw-timber photo plot, every 8th small saw-timber, every 17th pole-timber, and every 30th seedling, sapling, and denuded plot was taken. A sample of idle and agricultural plots is also checked.



4. Growth estimates are based on increment borings taken from trees of the various diameters and species in each forest type and stand class.



5. Estimates of the amount of wood produced as primary forest products are obtained from sawmills, pulpmills, veneer plants, and other wood-using industries. Other surveys are made to determine the amount of fuelwood and fence-post production. In addition, studies of wood utilization are made to adjust reported production of the various commodities to drain in terms of inventory volumes.



6. All field data are sent to Asheville for editing and are placed on punch cards for machine tabulation. Final estimates are based on statistical summaries.

DEFINITION OF TERMS

Land-Use Classes

Forest. Land bearing forest growth, land from which the forest has been removed and which shows no evidence of any other recent land use, or former agricultural land which now has a five-percent stocking of trees. Subdivided into the following classes:

Commercial: Land bearing, or capable of bearing, timber of commercial character and available now or prospectively for commercial use.

Withdrawn: Forest land in public ownership upon which commercial timber cutting is prohibited.

Non-productive: Forest land of such low productivity or so inaccessible that commercial timber will not be produced.

Non-forest. Land less than five percent stocked with trees and showing evidence of non-forest use.

Agriculture: Under cultivation or in pasture, including farm yards on active farms.

Idle: Land previously cultivated or pastured but now idle or abandoned. If reverting to forest there must be less than five percent stocking of trees.

Marsh: Low, boggy, non-forested land usually supporting a heavy growth of grass.

Sand dunes and beach: Non-forested sand dunes or coastal beaches.

Water: Includes both the small ponds and lakes less than 40 acres in size and streams, sloughs, and canals less than ten chains in width classed as "land area" by the Bureau of the Census. Also includes the "inland water" listed by the Census. On coastal areas the water-line is the mean high-tide mark; tidal flats are classed as water.

Urban and other: Includes towns, suburban areas being developed for residential or other urban purposes, school yards, cemeteries, industrial sites, roads, railroads, power lines, and other rights-of-way. Scattered areas of timber within exterior boundaries of cities or villages are also included.

Forest Types

Longleaf pine. Stands in which coniferous species comprise at least 25 percent of the dominant and co-dominant trees, with longleaf pine predominating. Slash pine is included in this type.

Loblolly pine. Stands in which coniferous species comprise at least 25 percent of the dominant trees, with loblolly pine predominating. Spruce pine is included in this type.

Shortleaf pine. Stands in which coniferous species comprise at least 25 percent of the dominant and co-dominant trees, with shortleaf pine predominating. Virginia pine and redcedar are included in this type.

Pond pine. Stands in which coniferous species comprise at least 25 percent of the dominant and co-dominant trees with pond pine predominating.

Cypress. Stands in which cypress or cypress in mixture with tupelo comprise at least 25 percent of the dominant and co-dominant trees, with cypress predominating.

Lowland hardwoods. Stands in which mixed hardwoods such as tupelo gum, blackgum, sweetgum, white oak, water oak, red maple, and ash comprise at least 75 percent of the dominant and co-dominant trees. Found along rivers, small streams, and on flat, poorly-drained areas of the Coastal Plain.

Upland hardwoods. Stands in which mixed hardwoods such as southern red oak, scarlet oak, white oak, black oak, post oak, hickory, and yellow-poplar comprise at least 75 percent of the dominant and co-dominant trees. Found on mountain slopes, the rolling hills of the Piedmont, and occasionally on the drier sites in the Coastal Plain.

Scrub oak. Stands in which scrub species such as blackjack, bluejack, turkey, and laurel oaks predominate and in which sound commercial species comprise less than five percent of satisfactory stocking.

Stand-Size Classes

Saw timber. Stands containing at least 1,500 board feet net, International 1/4-inch log rule, per acre in sound, live, softwood trees 9.0 inches d.b.h. or larger or hardwood trees 11.0 inches d.b.h. or larger. Two classes of saw-timber stands are recognized:

Large saw timber: Stands of saw timber having more than 50 percent of the net board-foot volume in softwood trees 15.0 inches d.b.h. or larger, or hardwood trees 17.0 inches d.b.h. or larger.

Small saw timber: Stands of saw timber having 50 percent or less of the net board-foot volume in softwood trees 15.0 inches d.b.h. or larger, or hardwood trees 17.0 inches d.b.h. or larger.

Pole timber. Stands at least 10 percent stocked with pole-size or larger timber, at least one-half in pole sizes, and which have less than 1,500 board feet net per acre of saw timber.

Seedling and sapling. Stands less than 10 percent stocked by pole-size or larger trees and with less than 1,500 board feet net per acre, but at least 40 percent stocked with commercial species. Eight hundred seedlings or saplings per acre are considered full stocking.

Poorly stocked and unstocked. Stands of pole-size or larger trees that are less than 10 percent stocked, seedling or sapling stands less than 40 percent stocked, or nonstocked forest land.

Diameters

D.b.h. (diameter at breast height). Stem diameter in inches, outside bark, measured at 4½ feet above the ground.

Diameter class. All trees were tallied by 2-inch diameter classes, each class including diameters 1.0 inch below and 0.9 inch above the stated midpoint; e.g., trees 7.0 to and including 8.9 inches are in the 8-inch class.

Tree Classification

Sound saw-timber trees. Softwood trees at least 9.0 inches d.b.h. and hardwood trees at least 11.0 inches d.b.h., with not less than one merchantable butt log 12 feet long, or with 50 percent of the gross volume of the tree in sound saw timber.

Sound pole-timber trees. Straight-boled trees between 5.0 inches d.b.h. and saw-timber size.

Cull trees. Trees that fail to qualify as sound saw timber or pole timber because of poor form, excessive limbiness, rot, or other defect. Volumes shown for cull trees include also the limbs, in sections four feet long and at least 4.0 inches in diameter inside bark, of saw-timber size hardwoods.

Species Groups

Softwoods. All of the pines, eastern redcedar, pond cypress, baldcypress, and hemlock.

Soft hardwoods. Black and water tupelos, sweetgum, soft maple, yellow-poplar. The other soft hardwoods include sweetbay, cottonwood, willow, and southern magnolia.

Hard hardwoods. All of the oaks, hickories, and ash. Volumes shown for sycamore and birch also include river birch, beech, elm, honeylocust, and sycamore.

Volume Estimates

Board-foot volume. The volume in board feet, measured by the International 1/4-inch rule, exclusive of defect, of that portion of saw-timber trees between the stump and the upper limit of merchantability for sawlogs.

Volume in cords. For sound trees the volume in standard cords (including bark) of the sound portion of trees 5.0 inches d.b.h. and larger, between stump and a minimum top-stem diameter of 4.0 inches inside bark. For cull trees similar volumes are included plus the volume in limbs, in sections four feet long and at least 4.0 inches in diameter inside bark, of saw-timber size hardwoods.

Volume in cubic feet. Same as volume shown in cords except bark is not included.

International 1/4-inch log rule. A rule for estimating the board-foot volume of 4-foot log sections, according to the formula $V = .905 (0.22D^2 - 0.71D)$. The taper allowance for computing the volume in log lengths greater than four feet is 0.5 inch per 4-foot section. Allowance for saw kerf is 1/4 inch.

Standard cord. A stacked pile, 4 x 4 x 8 feet, of round or split bolts, estimated to contain, on the average, 90 cubic feet of softwoods (wood and bark) or 80 cubic feet of hardwoods (wood and bark).

Growth and Drain

Growing stock

Saw timber: The sawlog volume of all sound saw-timber size trees.

All timber: The cord or cubic-foot volume of the entire stem from stump to a minimum 4-inch diameter inside bark, of all sound trees 5.0 inches d.b.h. or larger. No limbs or cull trees included.

Net growth

Board foot: The change during the calendar year in the saw-timber growing stock resulting from tree growth and mortality losses. Includes the gains accruing from the growth of small trees into saw-timber sizes during the year.

Cord or cubic foot: The change during the calendar year in the stem volume of all sound trees 5.0 inches and larger resulting from tree growth and mortality losses. Includes the gains accruing from the growth of saplings into pole sizes during the year.

Mortality

Board foot: The net volume lost from the saw-timber growing stock during the calendar year by the death of individual trees through the normal action of fire, tree competition, disease, insects, drought, and wind. Catastrophic losses did not occur during the growth period.

Cord or cubic foot: The net volume lost from the all-timber growing stock during the calendar year by the death of individual trees through natural causes.

Commodity drain

Board foot: The net volume removed from the saw-timber growing stock through cutting of timber products and logging waste during the calendar year.

Cord or cubic foot: The net volume removed from the all-timber growing stock through cutting of timber products and logging waste during the calendar year.

RELIABILITY OF THE DATA

Forest area: In estimating the areas of various categories of land there are two possible sources of error: (1) errors in classifying field plots or in compiling the data, and (2) sampling errors. The first arise from mistakes of judgment or technic and can be minimized by the exercise of care and skill even though it is seldom possible to evaluate them. In this survey every effort was made to maintain a high order of accuracy in the collection and compilation of data. In the field this took the form of frequent checks and a continuous program of training. In the office the work was organized to permit automatic machine verification of most of the important operations.

Sampling errors (standard errors of estimate), on the other hand, carry no connotation of faulty work, but are theoretical measures of the reliability of estimates based on the variability exhibited by sample measurements. The sampling intensity was sufficient to provide an estimate of the forest acreage of the state with a standard error of ± 0.7 percent. This indicates the probabilities are two out of three that the actual forest area is within ± 0.7 percent of the value given, provided measurement and computing errors have introduced no bias.

Timber volumes: in estimating timber volumes, the possible sources of error include (1) and (2) above, and in addition, (3) inaccurate measurements of tree diameter, height, form, or cull, and (4) bias resulting from improper construction or use of tree volume tables. As in the case of area determinations, every effort was made to secure accurate measurements through frequent checks and training. The volume tables used also were checked and were found to give reasonably accurate figures. The standard error of estimate of the board-foot volume of saw timber in the state is ± 1.6 percent; a corresponding error for the total volume in cords was not computed, but it should be smaller.

Drain volumes: The principal sources of error in surveys to obtain timber drain estimates are: (1) reporting errors, (2) canvassing errors, (3) errors in compiling the data, and (4) sampling errors. Reporting, canvassing, and compilation errors were held to a minimum through the use of trained enumerators, check surveys of the original field data, and verification of all computations.

Sampling errors were the only measurable errors involved. The sampling error of cubic-foot estimates of the total state drain by commodity varied from ± 1.8 percent for lumber to ± 11.4 percent for fence posts, with a combined error for all products of ± 1.9 percent.

Use of county data: The tables showing area and timber volumes for individual counties are included to facilitate the grouping of counties in any desired combination. Statistics for individual counties have a standard error of estimate for forest area ranging from ± 0.9 to ± 14.7 percent, and for board-foot volume from ± 6.7 to ± 16.5 percent. Obviously, detailed

comparisons between counties are subject to considerable error. Grouping a number of counties together will reduce the magnitude of the area error and volume error for the combined counties, and make these data sufficiently accurate for most purposes.

Drain estimates for all products except fuelwood and fence posts are reasonably accurate since no sampling errors are involved. Individual county estimates for fuelwood and fence posts may have sampling errors ranging from 35 to 70 percent.

FOREST SURVEY REPORTS PUBLISHED BY SOUTHEASTERN FOREST EXPERIMENT STATION

Forest Survey Releases

- No. 1 - Forest Resources of the Northern Coastal Plain of South Carolina. 1939
- No. 2 - Forest Resources of the Piedmont Region of South Carolina. 1939
- No. 3 - Forest Resources of the Southern Coastal Plain of South Carolina. 1939
- No. 4 - Forest Resources of the Southern Coastal Plain of North Carolina. 1940
- No. 5 - Forest Resources of the Northern Coastal Plain of North Carolina. 1940
- No. 6 - Forest Resources of the Piedmont Region of North Carolina. 1940
- No. 7 - Forest Resources of the Mountain Region of North Carolina. 1941
- No. 8 - The Distribution of Commercial Forest Trees in North Carolina. 1941
- No. 9 - The Distribution of Commercial Forest Trees in South Carolina. 1941
- No. 10 - The Distribution of Commercial Forest Trees in Virginia. 1942
- No. 11 - Virginia's Forests. 1942
- No. 12 - The Forest Situation in the Coastal Plain of Virginia. 1943
- No. 13 - The Forest Situation in Piedmont Virginia. 1943
- *No. 14 - Preliminary Estimate of 1942 Lumber Production in the Carolinas, Virginia, West Virginia, Kentucky, and Tennessee. 1943
- *No. 15 - The Forest Situation in the Mountain Region of Virginia. 1943
- *No. 16 - Wartime Lumber Production in the Appalachian Hardwood Region, January 1942-June 1944. 1944
- No. 17 - Wood Waste Available for Conversion to Ethyl Alcohol in the Columbia Area of South Carolina. 1944
- No. 18 - North Carolina Forest Growth and Drain, 1937-1943. 1945
- No. 19 - Approximate Forest Area and Timber Volume by County in the Carolinas and Virginia. 1945
- No. 20 - South Carolina Forest Growth and Drain, 1936-1943. 1945
- No. 21 - 1945 Pulpwood Production by County in the Carolinas and Virginia. 1946
- No. 22 - Southern Forests as a Source of Pulpwood. 1947
- No. 23 - 1946 Pulpwood Production by County in the Southeast. 1947
- No. 24 - Southern Pulpwood Production and the Timber Supply. 1948
- No. 25 - Forest Resources of the Lower Coastal Plain of South Carolina. 1948
- No. 26 - 1946 Commodity Drain by County from South Carolina Forests. 1948
- No. 27 - 1947 Pulpwood Production by County in the Southeast. 1948

USDA Miscellaneous Publications

- *No. 533 - North Carolina Forest Resources and Industries. 1944
- No. 552 - South Carolina Forest Resources and Industries. 1944

*Out of print.

